



INDIANA UNIVERSITY
SCHOOL OF MEDICINE



2022 DEPARTMENT OF MEDICINE ANNUAL REPORT

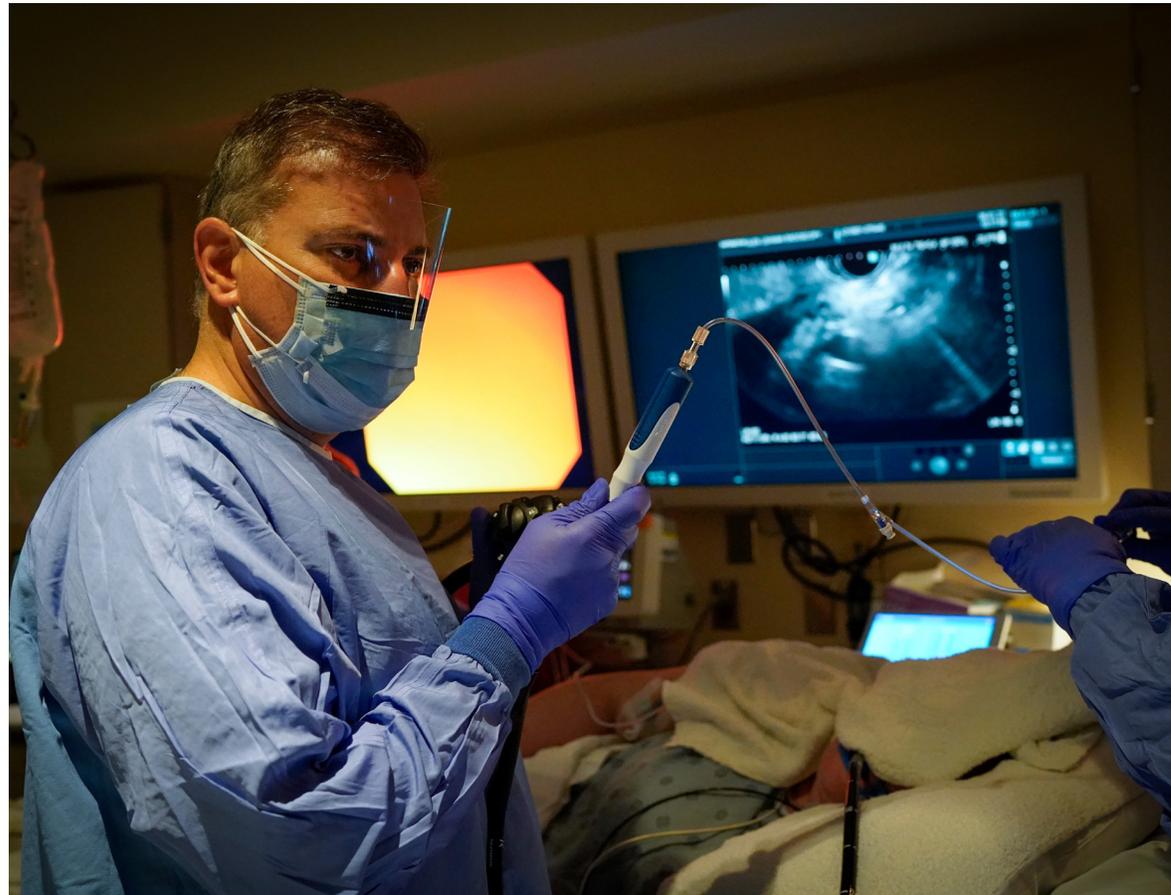


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STATEMENT OF INCLUSIVE EXCELLENCE

The Department of Medicine strives for inclusive excellence. Inclusive excellence is the practice of assuring equity and inclusion in all matters pertaining to faculty, trainees and staff, as well as the continuous examination of departmental practices and operations. It is the recognition that the department’s success is dependent on how we value, engage and include the rich diversity of faculty, trainees, staff and alumni.

MESSAGE FROM THE CHAIR



It is terrific to welcome you to this review of the Department of Medicine at Indiana University School of Medicine. We are a large and diverse department, encompassing more than 1,900 faculty members across ten specialty divisions and nine regional campuses of the country’s largest medical school.

I entered this role in January 2022, a time when the COVID-19 pandemic was still impacting our everyday operations and sense of wellbeing. Nonetheless, I experienced the positive, collaborative culture of the department and the larger academic health center enterprise from day one. While the challenges presented by the pandemic are ongoing, they have also demonstrated that our department truly abides by the ethos that “a rising tide lifts all boats.” We manifest this by helping those around us to succeed. One year into my role as chair, I have seen amazing accomplishments at all levels of our organization.

In this concise report, you will find evidence of a thriving department with a growth mindset and a positive trajectory in our major domains of medical education, clinical care, and discovery. None of our success would be possible without the support and leadership of our department and division staff, who deserve more kudos than we could ever bestow.

I hope this document is helpful to you as a primer to learn more about the exciting work being done to advance human health in Indiana and beyond. We strive to be leaders in all we do, and this report provides just a small sampling of our success. Thank you for your interest in the Department of Medicine!

Sincerely,

David M. Aronoff, MD, FIDSA, FAAM
John B. Hickam Professor of Medicine
Chair, Department of Medicine

NEW LEADERS IN 2022



LANA DBEIBO, MD
Assistant Professor of Clinical Medicine
Associate Vice Chair for Clinical Affairs - Quality, Safety and Population Health

ASHLEY GILMORE, MD
Assistant Professor of Clinical Medicine
Assistant Vice Chair for Health Equity



JENNIFER HUR, MD
Assistant Professor of Clinical Medicine
Program Director, Internal Medicine Residency (Indianapolis)

LAUREN NEPHEW, MD, MA, MSCE
Assistant Professor of Medicine
Associate Vice Chair for Health Equity



BRADLEY SUTTER, MD
Assistant Professor of Clinical Medicine
Interim Vice Chair for Clinical Affairs

KARA WOOLS-KALOUSTIAN, MD
Joe and Sarah Ellen Mamlin Professor of Global Health Research
Vice Chair for Research



As of January 2023:
MOHAMMAD AL-HADDAD, MD
Professor of Medicine
Director of the Division of Gastroenterology and Hepatology

As of March 2023:
JULIE CLARY, MD, MBA
Associate Professor of Clinical Medicine
Vice Chair for Clinical Affairs

EQUITY, DIVERSITY AND INCLUSION

2022 Highlights in Equity, Diversity and Inclusion



SYLK SOTTO, EDD, MBA, MPS
Vice Chair for Faculty Affairs and Professional Development
Vice Chair for Diversity, Health Equity, and Inclusion

New Leadership

Francesca Duncan, MD, was named Co-Chair of the Equity and Inclusion Committee, and **Cynthia Brown, MD**, was named Co-Chair of the Women in Medicine and Science (WIMS) Group. In the latter half of the year, the WIMS group welcomed trainees to several events and will continue to host frequent trainee-inclusive events in 2023.

Health Equity Focus

The department implemented a new department-wide focus on health equity. This began with new leaders: **Lauren Nephew, MD, MA, MSCE**, was named Associate Vice Chair for Health Equity, and **Ashley Gilmore, MD**, was named Assistant Vice Chair for Health Equity. In December, Dr. Nephew, Dr. Gilmore, and Dr. Sotto put forth the Department of Medicine Health Equity Strategic Proposal, which commits the department to identifying and understanding the burden of health disparities in six strategic areas, and then beginning to intervene on them. Watch for more on this in 2023.

The department also launched the Health Equity Research Collaborative for those interested in collaborations to help advance this work. The Collaborative's first meeting was focused on developing proposals for the Primary Care Reaffirmation for Indiana Medical Education (PRIME) grant program, and resulted in four funded projects.

Continued Success of the Leadership Program

2022 marked the second successful year of the Strategic Equity and Inclusion Leadership Program. This year's cohort included 11 participants from across the department, the school and the IU Health system.

Expansion of Partnership with Puerto Rican Medical Schools

For the third year, faculty from the Department of Medicine participated in mock interviews for medical students from Ponce Health Sciences University, Universidad Central del Caribe (UCC) and San Juan Bautista School of Medicine. Ponce has participated in these mock interviews since 2020; UCC and San Juan Bautista joined the effort this year. Sixty-two students signed up. Additionally, this year the department partnered with faculty from Albert Einstein College of Medicine in New York to host the interviews.

STORIES FROM THE DEPARTMENT OF MEDICINE BLOG

August 16, 2022 | <https://medicine.iu.edu/blogs/the-beat/wimsopenform>

WIMS OPEN FORUM WITH TRAINEES “A RESOUNDING SUCCESS”

On the evening of August 10, about 40 women faculty, residents and fellows from the Department of Medicine gathered at Saint Joseph’s Public House in Indianapolis to socialize, share experiences, and identify new ways to support and encourage one another.

The event, titled “Prescription for Change: Amplifying Women in Medicine and Science,” was hosted by Francesca Duncan, MD, of the Women in Medicine and Science (WIMS) group.

“As a junior faculty member, I believe it is so important to bridge the gap between trainees and faculty in medicine and science,” said Duncan, who is an assistant professor of clinical medicine in the Division of Pulmonary and Critical Care Medicine. She is also the co-chair of the department’s Equity and Inclusion Committee.

This open forum was the first WIMS event targeted specifically to women-identified residents and fellows in the Department of Medicine. It was “a resounding success,” according to Cindy Brown, MD, who is WIMS co-chair. “I was so excited to see the enthusiasm of this group,” she said.

During the gathering, the attendees shared both the good and the bad experiences that have shaped them into the clinicians and researchers they are today, Duncan said. They also discussed ways to encourage, support, and amplify each other as women in their respective fields.

“Being a woman in medicine poses certain challenges, and sometimes we feel that our voices go unheard,” said Katie Partyka, MD, a PGY-3 resident in the Internal Medicine/Pediatrics program. “This event created a space for women at all different stages of training to share their stories, support each other and collaborate.”

Kassy Kneen, MD, a PGY-1 intern in the Internal Medicine residency, said she attended the event to learn about mentorship opportunities from other female physicians, and, being new to both IU and Indianapolis, make connections.

Sarah Seyffert, MD, a fellow in Pulmonary and Critical Care, said that she initially attended the event with the mindset that it was a social gathering.

“However, it was empowering to see women of all backgrounds and at different stages in their careers come together to discuss both our struggles and our triumphs as women in medicine,” she said.

“I had a great experience hearing about all the different ways the group is involved with Graduate Medical Education, and hearing advice about intern year,” she said.

Duncan said she hoped the event helped trainees recognize themselves in the stories and experiences of the faculty members. Additionally, she hopes that the event created opportunities for mentorship and collaboration.

Ideally, many of these new connections will continue to be fostered via WIMS. Brown says she is inspired to see the women who will be the future of the department—and of medicine more broadly.

“By attending this event, I realized that there is a community of women at IU who are eager to support me not only in medicine, but also willing to help me navigate life as a woman in general,” said Seyffert. “I couldn’t ask for a better environment to train in or a community to be a part of.”



Syk
@drssotto

Great conversations and a good time. Who are we? The leaders and future leaders of @IUSMDeptMed smashing a bit of the patriarchy tonight! 😊 Thanks to the faculty and trainees attending! More to come. Thanks also to @ForeverFancy17 for guiding us in conversation. @CynthiaBrownMD1



10:03 PM · Aug 10, 2022 · Twitter for iPhone

For more stories from the Department of Medicine, visit medicine.iu.edu/blogs/the-beat.

FACULTY AFFAIRS AND PROFESSIONAL DEVELOPMENT

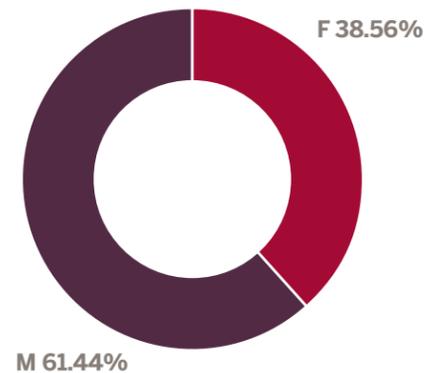
Department of Medicine Faculty Demographics

As of November 2022

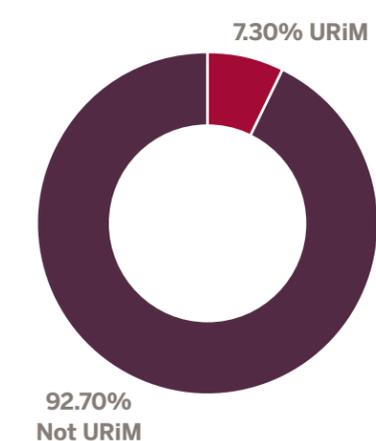


SYLK SOTTO, EDD, MBA, MPS
Vice Chair for Faculty Affairs and Professional Development
Vice Chair for Diversity, Health Equity, and Inclusion

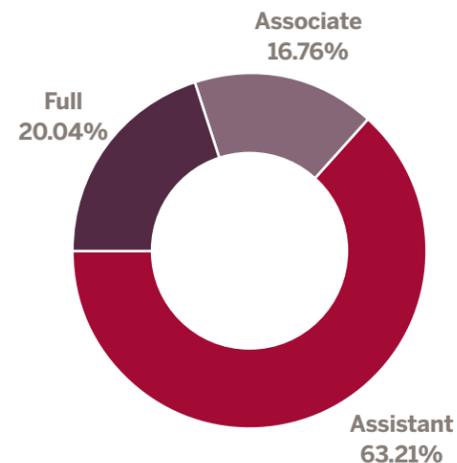
FACULTY BY GENDER



UNDERREPRESENTED IN MEDICINE (URiM)



FACULTY BY RANK



2022 Highlights in Faculty Affairs

EXCELLENT RECRUITMENT

This year, **108** new faculty members joined the Department of Medicine.

LAUNCH OF THE CLIMATE SURVEY

In late spring, the department launched the Department of Medicine **Climate and Professional Fulfillment Survey**, an important measure of wellbeing in the department. The response rate was robust, and the feedback was illuminating. The results are still being analyzed, and will be reported in 2023.

PROMOTIONS

FULL PROFESSOR

Cynthia Brown, MD
Professor of Clinical Medicine
Division of Pulmonary, Critical Care, Sleep and Occupational Medicine

W. Graham Carlos, MD
Professor of Clinical Medicine
Division of Pulmonary, Critical Care, Sleep and Occupational Medicine

Mary de Groot, PhD
Professor of Medicine
Division of Endocrinology and Metabolism

Monika Fischer, MD
Professor of Medicine
Division of Gastroenterology and Hepatology

Chadi Hage, MD
Adjunct Clinical Professor of Medicine (Volunteer)
Division of Pulmonary, Critical Care, Sleep and Occupational Medicine

Babar Khan, MD
Professor of Medicine
Floyd and Reba Smith Professor of Respiratory Disease
Division of Pulmonary, Critical Care, Sleep and Occupational Medicine

Marianne Matthias, PhD
Senior Research Professor of Medicine
Division of General Internal Medicine and Geriatrics

Peter Schwartz, MD, PhD
Professor of Medicine
Division of General Internal Medicine and Geriatrics

ASSOCIATE PROFESSOR

Matthew Bohm, DO
Associate Professor of Clinical Medicine
Division of Gastroenterology and Hepatology

Saira Butt, MD
Associate Professor of Clinical Medicine
Division of Infectious Diseases

Julie Clary, MD
Associate Professor of Clinical Medicine
Division of Cardiovascular Medicine

Christen Dilly, MD
Associate Professor of Medicine
Division of Gastroenterology and Hepatology

Clifford Dotson, MD
Adjunct Clinical Associate Professor of Medicine
(Part-Time - Evansville campus)

Greg Durm, MD
Associate Professor of Clinical Medicine
Division of Hematology/Oncology

Laurel Fick, MD
Adjunct Clinical Associate Professor of Medicine
(Volunteer - Indianapolis campus)

Hato Takashi, MD
Associate Professor of Medicine
Division of Nephrology

Roger Johnson, MD
Adjunct Clinical Associate Professor of Medicine
(Volunteer - Evansville campus)

Rajat Kapoor, MD
Associate Professor of Clinical Medicine
Division of Pulmonary, Critical Care, Sleep and Occupational Medicine

Swapnil Khare, MD
Associate Professor of Clinical Medicine
Division of Endocrinology and Metabolism

Heiko Konig, PhD, MD
Adjunct Clinical Associate Professor of Medicine
Division of Hematology and Oncology (Volunteer)

Irfan Munir, MD
Adjunct Clinical Associate Professor of Medicine
(Volunteer - Fort Wayne campus)

Esteban Ramirez, MD
Adjunct Clinical Associate Professor of Medicine
(Volunteer - West Lafayette campus)

Roopa Rao, MD
Associate Associate Professor of Clinical Medicine
Division of Cardiovascular Medicine

Karl Sash, MD
Adjunct Clinical Associate Professor of Medicine
(Volunteer - Evansville campus)

Robert Spear, MD
Adjunct Clinical Associate Professor of Medicine
(Volunteer - Evansville campus)

Tanya Tanawuttiwat, MD
Associate Associate Professor of Clinical Medicine
Division of Cardiovascular Medicine

Margaret Zelasko, MD
Adjunct Clinical Associate Professor of Medicine
(Volunteer - Muncie campus)

STORIES FROM THE NEWSROOM

<https://medicine.iu.edu/news/2022/03/ibj-forty-under-40>

IU SCHOOL OF MEDICINE FACULTY NAMED IBJ FORTY UNDER 40 HONOREES

March 25, 2022

Two Indiana University School of Medicine faculty have been named 2022 Indianapolis Business Journal Forty Under 40 honorees. Lana Dbeibo, MD, and Kenneth Lim, MD, PhD were chosen for the prestigious honor.

Each year, the IBJ honors 40 individuals who have made their mark in their profession before the young age of 40. Honorees were selected by a committee from hundreds of individuals nominated by IBJ readers. Regardless of their field or profession, this diverse group of individuals is making a positive impact on the community. This is the 30th year for the awards.

LANA DBEIBO, MD

In the summer of 2020, Dbeibo was one of several medical and public health experts appointed to lead IU's COVID-19 Medical Response Team, which was charged with helping to keep the IU community safe from the virus. She currently serves as director of COVID-19 vaccine initiatives for IU. Dbeibo is also the director of infection prevention at Indiana University Health Methodist Hospital. She provides inpatient consults and outpatient infectious disease consults and HIV care.

After graduating medical school from the American University of Beirut, Dbeibo completed her residency in internal medicine and fellowship in infectious diseases at IU School of Medicine.



KENNETH LIM, MD, PHD

Lim is a physician-scientist, nephrologist and entrepreneur in the IU School of Medicine Division of Nephrology. His clinical interests include chronic kidney disease (CKD), end-stage kidney disease and dialysis. He is a leading expert in cardiovascular complications in patients with CKD. Lim has a mission to advance the care of kidney patients and to create potential solutions to challenging issues of humanitarian need in healthcare through innovative research, entrepreneurship and the delivery of medical care beyond borders. He has deployed to regions around the world to provide medical care to help meet critical needs of victims of humanitarian crises, such as war, poverty and natural disasters on the frontlines.

Prior to joining IU School of Medicine in 2020, Lim spent over 10 years at Harvard Medical School and affiliated major teaching hospitals, later becoming an attending physician at the Massachusetts General Hospital and a faculty member at Harvard Medical School. He is a graduate of the University of Cambridge (Christ's College) and the University of Warwick in England.

CLINICAL AFFAIRS



BRAD SUTTER, MD
Interim Vice Chair, Clinical Affairs



JULIE CLARY, MD
Vice Chair, Clinical Affairs, effective March 1, 2023

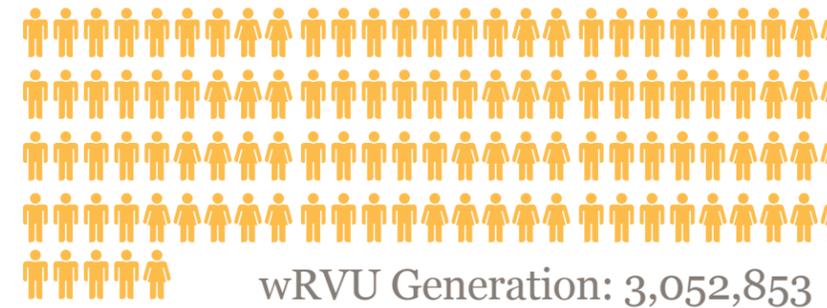


TARA CASEY, MHA
Associate Vice Chair for Clinical Affairs

2022 Highlights in Clinical Affairs

TOTAL CLINICAL ACTIVITY FOR 2022

Including data from IU Health, Eskenazi, and the Roudebush VA
Each person shown represents approximately 10,000 people.



- Expansion of the "Hospital at Home" program to include non-COVID patients
- Expansion of Cancer services to IU Health West to include a new outpatient and infusion clinic
- 15 additional clinical faculty were hired in 2022 across the Department of Medicine
- Established a Virtual Liver Program between IU Adult Academic Health Center and IU Health West

RESEARCH



KARA WOOLS-KALOUSTIAN, MD
Vice Chair, Research

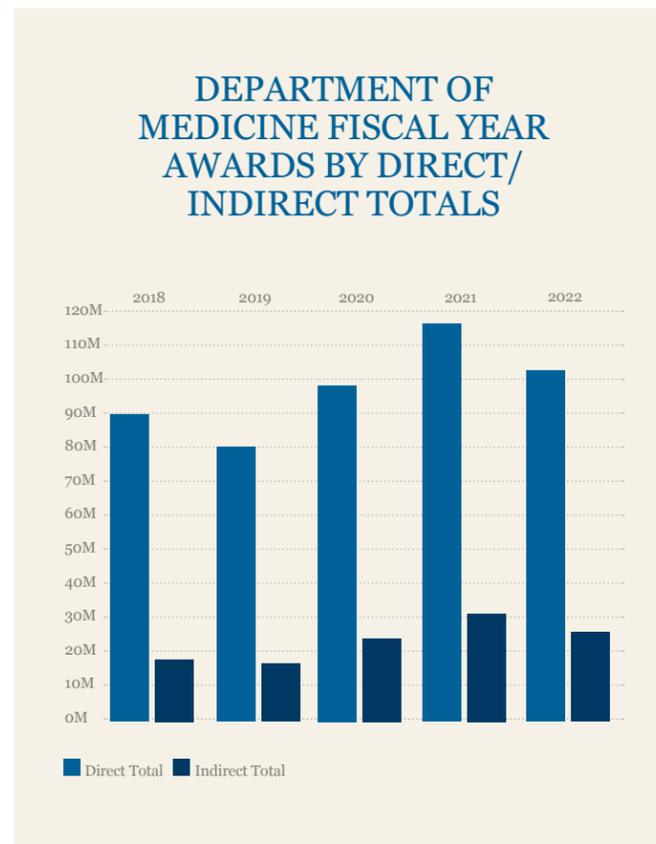
2022 Highlights in Research

Kara Wools-Kaloustian, MD, named Vice-Chair of Research

Dr. Wools-Kaloustian, the Joe and Sarah Ellen Mamlin Professor of Global Health Research, was named the Vice Chair of Research in April 2022. As Vice Chair, Dr. Wools-Kaloustian is leading the development of the 5-year Research Strategic Plan for the Department of Medicine. She is working to ensure consistent and quality mentorship for early stage investigators joining the Department of Medicine faculty; identify and implement programs that support investigators transitioning from early to middle stages of their career; increase cross-disciplinary research within the department; and introduce reciprocal innovation as a platform to enhance research productivity while also enriching diversity, equity, and inclusion.

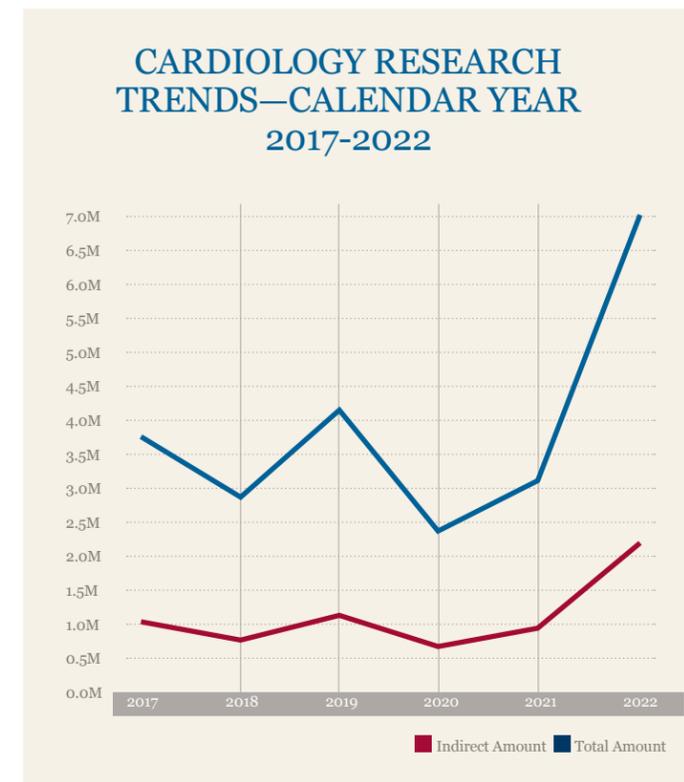
Department of Medicine Research Strategic Planning

A team of research leaders from the Chair's Office and the divisions has developed and refined a Research Strategic Plan for the department. This group is collaborating with Dr. Sylk Sotto, Vice Chair Diversity, Health Equity, and Inclusion, to ensure that these principles are integral to our approach. The group has initiated the first in a series of three surveys to garner faculty input on the plan, which will be finalized at the Department of Medicine Research Retreat on June 9, 2023.



Growth in Cardiovascular Disease Research

The Cardiovascular Disease Research portfolio has grown significantly with both recruitment of investigators as well as mentorship of existing faculty who have secured new awards for their science. The division's research growth is in sync with Cardiovascular Institute's establishment of the Krannert Cardiovascular Research Center and recruitment of Rohan Dharmakumar, PhD, as its Executive Director.



Continued focus on Aging and Dementia

The Division of General Internal Medicine and Geriatrics and the Division of Clinical Pharmacology continue to significantly contribute to research focused on Alzheimer's Disease and related dementias (ADRD). The IUSM-Purdue TREAT-AD (Target Enablement to Accelerate Therapy Development for AD) Center, an NIH-NIA funded Alzheimer's disease drug discovery initiative, is in its fourth year of operation and has made tremendous progress in translating new research insights into potential new therapies. This highly collaborative, interdisciplinary program is focusing on the role of neuroinflammation on the origin and progression of ADRD, and have advanced several novel drug targets along the path toward therapeutic discovery.

The Digital Detection of Dementia Studies (D cubed Studies) Team is working on leveraging advances in information technology and machine learning to develop, test, and implement an evidence based and scalable tool to detect people with Alzheimer's Disease and related dementias in urban and rural primary care clinics. With support from the NIH-NIA, they are conducting a pragmatic randomized controlled trial to evaluate the effectiveness of a Passive Digital Marker compared to a patient reported measure in enhancing the early detection of Alzheimer disease and other forms of dementia. This pragmatic study is being tested in the Federally Qualified Health Centers associated with Eskenazi Health, who serve a diverse population of older adults.

The work of the TREAT-AD Center and the D Cubed studies are part of the internationally recognized Alzheimer's disease and related dementias research program at IUSM bridging cutting-edge preclinical, clinical science, and implementation.

Replication of the Academic Model Providing Access to Healthcare (AMPATH)

The Academic Model Providing Access to Healthcare (AMPATH) has expanded into AMPATH Global with new institutional partnerships in Mexico, Ghana, and Nepal that form the foundation for academic activities in service, education and research. The AMPATH Kenya partnership between Moi University, Moi Teaching and Referral Hospital, and the AMPATH Consortium of 15 academic health centers around the world, led by IU, provides the model for creating opportunities for faculty to engage in global health research in areas of importance to local faculty and partner institutions.

Initial efforts have focused on assessing and supporting existing research infrastructure and capacity; identifying needs; and designing service, education and research programs that strengthen health systems and improve population health outcomes. The opportunity to engage in implementation research in multiple sites across the world has fostered collaboration between the leaders of these host country institutions and created a network of global partners that are committed to learning from one another and improving lives across a variety of geographic areas. AMPATH Global reflects a commitment to the principles that have defined the Indiana University Center for Global Health's focus on equity in partnership in Kenya over 30+ years including the concept of reciprocal innovation, the bi-directional, iterative exchange of ideas, resources and innovation.

EDUCATION



RAKESH MEHTA, MD
Vice Chair, Education

2022 Highlights in Education

>50%

HIGH NBME SCORES
FOR INTERNAL MEDICINE
CLERKSHIP STUDENTS

Our
3rd year students
averaged above the
50th percentile
for the end-of-the-clerkship
National Board of Medical Examiners
(NBME) exam.

Successful Fellowship Match for Residents in the Southwest Internal Medicine Residency Program

Four of the inaugural class of residents from our Evansville program matched into high-tier fellowships—including one coming to Indianapolis.

Elizabeth Cho, MD
The Warren Alpert Medical School of Brown University
Kidney Disease & Hypertension

Anthony El-Khoury, MD
University of Massachusetts Chan Medical School-
Baystate
Pulmonary Disease and Critical Care Medicine

Ana Salabasheva, MD
Geisinger's Medicine Institute
Pulmonary Critical Care

Christopher Shrack, DO
Indiana University School of Medicine
Nephrology Fellowship Training Program

Faculty Educators Recognized By Students

W. Graham Carlos, MD, of the Division of Pulmonary, Critical Care, Sleep and Occupational Medicine, received the Golden Apple award from the Class of 2022.

Zeb Saeed, MD, of the Division of Endocrinology, received the Outstanding Teaching Award in Internal Medicine from the Class of 2022.

PROGRAM LEADERSHIP

RESIDENCY PROGRAMS

Internal Medicine Residency - Indianapolis

Jennifer Hur, MD
Program Director

Julie Vannerson, MD
Associate Program Director

Curtis Wright, MD
Associate Program Director

Noelle Sinex, MD
Associate Program Director

Allyson Thomas, MD
Associate Program Director

Internal Medicine/Pediatrics Residency Program - Indianapolis

Timothy Brady, MD
Program Director

Amy M. Munchhof, MD, PhD
Associate Program Director

Michael J. Wilson, MD, PhD
Associate Program Director

Southwest Internal Medicine Residency Program - Evansville

Adrian Singano, MD
Program Director

Internal Medicine Residency at IU Health Ball Memorial Hospital

Brandon S. Dickey, MD, FACP
Program Director

INTERNAL MEDICINE CLERKSHIP

LeeAnn Cox, MD
Clerkship Director

Haley A. Pritchard, MS, MD
Associate Clerkship Director

Zeb Saeed, MD
Associate Clerkship Director

Justin J. Chow, MD, MS
Associate Clerkship Director

SUB-INTERNSHIP CLERKSHIP IN INTERNAL MEDICINE

Toan R. Vu, MD
Clerkship Director

Joseph P. Smith, MD
Associate Clerkship Director

Successful PRIME Grants

Four faculty projects were awarded PRIME (Primary Care Reaffirmation for Indiana Medical Education Program) grants.

- “Widening the Bottle Neck: Exploring the Breast Screening Program as an Effective Bridge to Lung Cancer Screening and Smoking Cessation”
Nasser Hanna, MD, and Ali Ajrouch, MD
- “Cardiovascular Equity to Address Segregation study (CEASe) 1.0”
Khadijah Breathett, MD, MS, FACC, FAHA, FHSA
- “Reducing Bias and Disparities in the Care of Patients with Obesity”
Christen Dilly, MD, ME, and Ashley Gilmore, MD
- “Addressing Disparities in Lung Cancer: An educational curriculum for trainees, PCPs, and community stakeholders”
Francesca Duncan, MD, MS, and Edwin Jackson, DO, MBA

New Alpha Omega Alpha Members

A significant number of Department of Medicine faculty and residents were inducted into the Alpha Omega Alpha (AOA) honor society this year.

Faculty inductees were **Jennifer Hur, MD**, who is the director of the Internal Medicine Residency Program in Indianapolis; **Areeba Kara, MD**, who is Associate Division Chief of the Division of General Internal Medicine and Geriatrics; and **LeeAnn Cox, MD**, who is Director of the Internal Medicine Clerkship.

Additionally, Internal Medicine residents **Vivianne Alsop, MD; Matthew Coghlan, MD; Matthew Hodge, DO; Ahmed Khalid, MBBS; and Lauren Pavlik, MD**, were inducted. Among residents from the Internal Medicine/Pediatrics program, **Connor Parker, MD; Juhi Ramchandani, MD; Ishani Shah, MD; and Stephen Watty, MD**, were also inducted.

Dr. Dilly Named Assistant Dean of Graduate Medical Education

Christen Dilly, MD, an Associate Professor of Medicine in the Division of Gastroenterology and Hepatology, was promoted to the role of Assistant Dean of GME.

STORIES FROM THE DEPARTMENT OF MEDICINE BLOG

October 12, 2022 | <https://medicine.iu.edu/blogs/the-beat/hispanicheritagemonthresidents>

CELEBRATING RESIDENTS OF HISPANIC HERITAGE

Each year, National Hispanic Heritage Month is observed from September 15 to October 15, to pay tribute to the generations of Hispanic Americans who have influenced and enriched the United States through achievements and contributions to society. Here, we recognize four members of the Internal Medicine Residency Program (Indianapolis) whose Hispanic heritage influences their work as physicians.



JANINA QUINTERO BISONO MS, MD | PGY-2

Janina Quintero Bisono, MS, MD, was born in Puerto Rico to a Dominican mother and Colombian father. "I'm proud of my multicultural

background and embracing where I'm from," she said.

Quintero attended Ponce Health Sciences University in Ponce, Puerto Rico. She said she chose to complete her residency in internal medicine at IU School of Medicine because of its great academic program, but was additionally pleased by the program's welcoming and supportive environment.

"I love the people and the way they make me feel at home away from home," she said. "In residency, you will have good days and difficult days, but I know I can always count on my residency family to get me through those days with a smile on my face."

For Quintero, having Hispanic heritage means having the opportunity to understand and address the barriers patients from diverse backgrounds face within our healthcare system.

"I strive to be better every day to give excellent care to the Latinx community and my patients from other countries," she said.



MARIEL LUNA HINOJOSA, MD | PGY-2

After attending medical school here, Mariel Luna Hinojosa, MD, knew that IU School of Medicine was the "perfect" place to complete her residency in internal medicine.

"Everyone in this program has always been kind, supportive, and genuine, and is always encouraging more to my full potential," she said. "Also, I love the diverse patient population and various pathologies we encounter in all our different hospital systems."

She has always known she wanted to work with the underserved, particularly within the Latinx community, and this program has given her the opportunity to do that in both inpatient and outpatient settings, she said.

Luna Hinojosa was born in Lima, Peru. She moved to the US when she was 14 years old and was raised in Northern Virginia. She said that her roots have helped her foster relationships with her patients and provide them with better care.

"My Latinx heritage gives me the opportunity to be an advocate for my Latinx community, especially now being in the role of a physician," she said. "This program has given me the opportunity to do so in both inpatient and outpatient medicine."



DIEGO IZQUIERDO, MD | PGY-1

Diego Izquierdo, MD, loves "movies and old rock and jazz" and attended medical school at Anahuac University in Mexico City.

"My Latine identity is the core of who I am," he said. "It reminds me of everything important to me: family, friends, joy."

He knew that he wanted to pursue his residency in internal medicine at IU School of Medicine after meeting current residents, who made him feel welcome and invigorated.

"Talking to the Hispanic residents that were already in the program and listening to their experience at IU made me realize the extraordinary place it is to grow both personally and professionally," he said.

Izquierdo appreciates that the program gives him the opportunity to work as the primary care provider for a broad Hispanic population in Indianapolis. As a physician, he loves to translate his shared cultural background with patients into stronger relationships and better care.

"This has been one of my greatest joys," he said.



ELEAZAR MONTALVAN-SANCHEZ, MD | PGY-2

Eleazar Montalvan-Sanchez, MD, has an ambitious goal: to be "a Latinx community role model to both this and future generations," he said.

Montalvan-Sanchez, who received his medical degree from Universidad Nacional Autonoma de Honduras, is already off to a great start. He has conducted several research projects; is a liaison to the National Hispanic Medical Association; serves on the Department of Medicine's Equity, Diversity & Inclusion Committee; and is the founder of Latin American Doctors for America (@AmericaDoctors), which advocates for decreasing health disparities.

"I chose IU because I was looking for the combination of a high-volume medical center and an academic university-based program. Now IU is part of my familia," he said. "I will always be grateful to be here."

For more stories from the Department of Medicine, visit medicine.iu.edu/blogs/the-beat.

CLINICAL AND ACADEMIC ADMINISTRATION



KERRY MAKIELSKI
Vice Chair, Clinical and Academic Administration

2022 Highlights in Clinical and Academic Administration

IU MyVoice staff engagement survey results demonstrate significantly increased engagement

My Voice at IU is a continuous process at Indiana University to increase staff employee engagement and ensure IU remains a workplace of choice.

This survey was last administered in 2019. Since then, the Department of Medicine's overall mean increased by .31, to 4.22 (on a 5 point scale). The department ranks at the 60th percentile for all organizations in the Gallup database.

Sixty-one percent of the 213 respondents reported being engaged, which is an increase of 20% from 2019.

Successful Recruitment of Administrators

The Department of Medicine recruited two new Service Line Administrators. **Maggie Bennett, BSN, RN**, started in March 2022 with Infectious Diseases, and **Tonya Somers, MS, RD, CDCES**, started in May 2022 with Endocrinology, Rheumatology, and Diabetes Center. Additionally, the department welcomed two new Division Administrators to their roles. **Chelsie Willoughby**, with Gastroenterology/Hepatology, started in November 2022, and **Adam Beach** started in December 2022 with Cardiovascular Medicine.

Continuous Improvement

Annually, the department participates in continuous improvement, and the focus for was on wellbeing, retention, and quality. This included the use of a new tool to measure climate and wellbeing; efforts to increase our overall employee engagement; and, on the clinical side, measures to improve mortality and harm events for our patients (see graph).

2022 ROLLING 12 MONTHS MORTALITY YTD



CONTINUED GENEROSITY FROM DONORS

In FY 2022, the Department of Medicine received a total of **\$8,555,942** in gifts from generous donors.

CARDIOVASCULAR MEDICINE



LEADERSHIP & ADMINISTRATION

SUBHA RAMAN, MD, MSEE
Medtronic Zipes Professor of Cardiology
Director, Division of Cardiovascular Medicine
Director, Cardiovascular Institute
Vice President of Cardiovascular Services (IU Health)

ALEXANDER SMOLENSKY, MD
Assistant Professor of Clinical Medicine
Service Line Leader

JEFFREY BREALL, MD, PHD
Professor of Clinical Medicine
Interim Associate Service Line Leader

ADAM BEACH
Division Administrator

LAURA THOMPSON
Service Line Administrator

Clinical

Areas of Excellence: coronary and ischemic heart disease; structural heart disease; heart failure; aortic disorders; peripheral vascular disease; rhythm disorders; cardiovascular disease prevention; cardiovascular informatics and technology

Education

Areas of Excellence: electrocardiography; interventional cardiology; structural heart cardiac interventions; cardiac electrophysiology; advanced cardiac imaging; clinical patient management

Demographics



FULL-TIME FACULTY 54

27 PART-TIME/AFFILIATE FACULTY



14
FACULTY IDENTIFYING AS FEMALE

Faculty Underrepresented in Medicine: 3

Fellows: 28

IU Staff: 32

IU Health Staff: 44

IU Health APPs: 22

FELLOWSHIPS

Cardiovascular Disease Fellowship (three years)

Director: Deepak Bhakta, MD
Associate Program Director for Research: Ankit Desai, MD

Interventional Cardiology Fellowship (one year)

Director: Elisabeth von der Lohe, MD
Associate Program Director for Research: Rolf Kreutz, MD

Cardiac Electrophysiology Fellowship (two years)

Director: John Miller, MD

Advanced Heart Failure and Transplant Fellowship (one year)

Director: Maya Guglin, MD, PhD

Adult Congenital Heart Disease Fellowship (two years)

Director: Stephen Cook, MD

Cardiovascular Innovations Fellowship (one year)

Director: Subha Raman, MD, MSEE

KEY CLINICAL EDUCATORS

Upasana Jarori, MD
Assistant Professor of Clinical Medicine

Abhishek Khemka, MD, MBA
Assistant Professor of Clinical Medicine

Research

Areas of Excellence: ischemic heart disease; heart failure; arrhythmias

NOTABLE PUBLICATIONS

Liu T, Howarth AG, Chen Y, Nair AR, Yang HJ, Ren D, Tang R, Sykes J, Kovacs MS, Dey D, Slomka P, Wood JC, Finney R, Zeng M, Prato FS, Francis J, Berman DS, Shah PK, Kumar A, Dharmakumar R. Intramyocardial Hemorrhage and the "Wave Front" of Reperfusion Injury Compromising Myocardial Salvage. *J Am Coll Cardiol.* 2022 Jan 4;79(1):35-48. doi: 10.1016/j.jacc.2021.10.034. PMID: 34991787.

Chen Z, Sung YL, Chen PS, Li X, Guo J. Na⁺, K⁺-Pump/Phospholemman Are Concentrated at Intercalated Discs for Conduction. *Circ Res.* 2022 Jul 22;131(3):283-285. doi: 10.1161/CIRCRESAHA.122.321167. Epub 2022 Jun 30. PMID: 35770663; PMCID: PMC9308724.

Cokic I, Chan SF, Guan X, Nair AR, Yang HJ, Liu T, Chen Y, Hernando D, Sykes J, Tang R, Butler J, Dohnalkova A, Kovarik L, Finney R, Kali A, Sharif B, Bouchard LS, Gupta R, Krishnam MS, Vora K, Tamarappoo B, Howarth AG, Kumar A, Francis J, Reeder SB, Wood JC, Prato FS, Dharmakumar R. Intramyocardial hemorrhage drives fatty degeneration of infarcted myocardium. *Nat Commun.* 2022 Oct 27;13(1):6394. doi: 10.1038/s41467-022-33776-x. PMID: 36302906; PMCID: PMC9613644.

ASSOCIATED INSTITUTE/ RESEARCH CENTERS

IUH/IUSM Cardiovascular Institute

Director: Subha Raman, MD

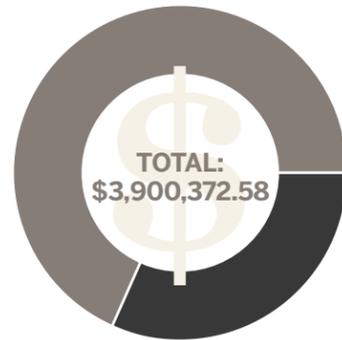
Krannert Cardiovascular Research Center

Director: Rohan Dharmakumar, PhD

Dharmakumar, PhD

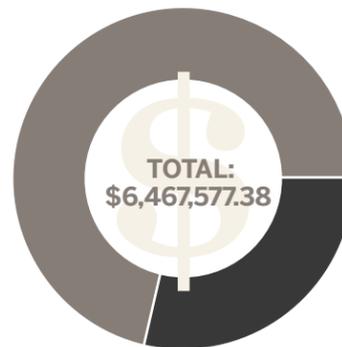
Charles Fisch Chair in Cardiology

**TOTAL NIH AWARD
DOLLARS (FY 22)**



**INDIRECT:
\$1,243,181.52**

**TOTAL AWARD
DOLLARS (FY 22)**



**INDIRECT:
\$1,855,807.52**

Additional Leadership Roles

Julie Clary, MD

Vice Chair of Clinical Affairs,
Department of Medicine

Richard Kovacs, MD

Chief Medical Advisor/Chief
Medical Officer, American College
of Cardiology

Subha Raman, MD

Immediate Past President,
Society for Cardiovascular
Magnetic Resonance

Featured Faculty

SUPARNA CLASEN, MD

Assistant Professor of Clinical
Medicine

- An outstanding leader in the field of cardio-oncology
- Has secured national recognition for the cardio-oncology program via external designation as a Cardio-Oncology Center of Excellence
- Has grown clinical services as well as research initiatives with her multidisciplinary team

ROHAN DHARMAKUMAR, PHD

Executive Director of the Krannert
Cardiovascular Research Center
Charles Fisch Professor of Cardiology

- An outstanding leader for cardiovascular research
- Has helped grow an extramurally funded research portfolio delivering high impact through both multidisciplinary recruitment as well as mentorship of existing faculty

Goals The division seeks to expand its general cardiovascular medicine fellowship program to support the development of physician-scientists. The division also looks forward to its continued progress along a four-year path towards a healthier, more sustainable valuation approach to its physician faculty.

STORIES FROM THE NEWSROOM

November 1, 2022 | <https://medicine.iu.edu/news/2022/11/iron-and-heart-failure-study>

IRON INDUCES CHRONIC HEART FAILURE IN HALF OF HEART ATTACK SURVIVORS, ACCORDING TO LANDMARK STUDY LED BY IU RESEARCHER



A multi-institution study led by Rohan Dharmakumar, PhD, of Indiana University School of Medicine, has identified that iron drives the formation of fatty tissue in the heart and leads to chronic heart failure in about fifty percent of heart attack survivors. The discovery, recently published in *Nature Communications*, paves the way for treatments that have the potential to prevent heart failure in nearly half a million people a year in the United States, and many millions more worldwide.

"For the first time, we have identified a root cause of chronic heart failure following a heart attack," Dharmakumar said.

Dharmakumar is executive director of IU's Krannert Cardiovascular Research Center and associate director for research at the Cardiovascular Institute, a joint enterprise between IU School of Medicine and IU Health.

"While advances across populations have made survival after a heart attack possible for most, too many survivors suffer long-term complications like heart failure," said Subha Raman, MD, who is physician director of the Cardiovascular Institute. "Dr. Dharmakumar's breakthrough science illuminates who is at risk and why and points to an effective way to prevent these complications."

The multi-million-dollar study, which involved collaborators from institutions in the United States and Canada, followed large animal models over six months. It found that in heart attacks that result in bleeding within the heart muscle—which is about half of them—scar tissue is slowly replaced by fat. Fatty tissue can't push blood from the heart effectively, and this is what leads to heart failure and eventually to death in many survivors of hemorrhagic heart attacks, Dharmakumar said.

"Using noninvasive imaging, histology and molecular biology techniques, and various other technologies, we have shown that iron from red blood cells is what drives this process," he explained. "When we removed the iron, we reduced the amount of fat in the heart muscle. This finding establishes a pathway for clinical investigations to remedy or mitigate the effects associated with iron in hemorrhagic myocardial infarction patients."

Dharmakumar's team is currently testing iron chelation therapy to do just that in a just-launched clinical trial.

"Thanks to a clinical trial underway being led by his team at Indiana University, I'm excited to see this treatment improve the lives of millions of heart attack survivors worldwide," said Raman.

For more stories from the Department of Medicine, visit medicine.iu.edu/blogs/the-beat.

Demographics

15 FULL-TIME FACULTY

60 PART-TIME/AFFILIATE FACULTY



FACULTY IDENTIFYING AS FEMALE

Faculty Underrepresented in Medicine: **6**

Fellows: **11**

IU Staff: **22**



LEADERSHIP & ADMINISTRATION

TODD SKAAR, PHD
Professor of Medicine
Interim Division Director

ZERUESENAY DESTA, PHD
Professor of Medicine
Associate Division Director

CHRISTINE MCDONALD
Division Administrator



MEENA S. MADHUR, MD, PHD
Division Director, Effective August 15, 2023

TOTAL NIH AWARD DOLLARS (FY 22)



TOTAL AWARD DOLLARS (FY 22)



NOTABLE PUBLICATIONS

Shugg T, Ly RC, Rowe EJ, Philips S, Hyder MA, Radovich M, Rosenman MB, Pratt VM, Callaghan JT, Desta Z, Schneider BP, Skaar TC. Clinical Opportunities for Germline Pharmacogenetics and Management of Drug-Drug Interactions in Patients With Advanced Solid Cancers. *JCO Precis Oncol.* 2022 Feb;6:e2100312. doi: 10.1200/PO.21.00312. PMID: 35201852; PMCID: PMC9848543.

Reagan AM, Christensen KE, Graham LC, Bedwell AA, Eldridge K, Speedy R, Figueiredo LL, Persohn SC, Bottiglieri T, Nho K, Sasner M, Territo PR, Rozen R, Howell GR. The 677C > T variant in methylenetetrahydrofolate reductase causes morphological and functional cerebrovascular deficits in mice. *J Cereb Blood Flow Metab.* 2022 Dec;42(12):2333-2350. doi: 10.1177/0271678X221122644. Epub 2022 Sep 1. PMID: 36050860; PMCID: PMC9670012.

Bamfo NO, Lu JB, Desta Z. Stereoselective Metabolism of Bupropion to Active Metabolites in Cellular Fractions of Human Liver and Intestine. *Drug Metab Dispos.* 2023 Jan;51(1):54-66. doi: 10.1124/dmd.122.000867. Epub 2022 May 5. PMID: 35512805; PMCID: PMC9832377.

ASSOCIATED RESEARCH CENTERS

- Indiana Institute for Personalized Medicine (IIPM)
- Indiana Clinical and Translational Science Institute (CTSI) Disease and Therapeutic Response Modeling Program
- Regenstrief Institute
- Stark Neurosciences Research Institute
- Indiana Biosciences Research Institute (IBRI)
- IU Melvin & Bren Simon Comprehensive Cancer Center

Featured Faculty

TYLER SHUGG, PHARMD, PHD
Assistant Research Professor of Medicine

- Completed his postdoctoral fellowship in clinical pharmacology at IU, and was promoted to faculty in January 2022
- K-23 grant was funded on the first submission
- Passed his certification exam by the American Board of Clinical Pharmacology, and joins four other faculty associated with our division who are board-certified in clinical pharmacology

Clinical

Areas of Excellence: Pharmacogenomics; drug-drug interactions; maintenance of the Drug Interactions Flockhart Table, a cytochrome P450 drug-drug interaction website

Education

Areas of Excellence: Sponsoring two fellowship programs; mentoring graduate students and postdoctoral fellows; offering graduate courses and a doctoral minor

FELLOWSHIPS

Clinical Pharmacology Fellowship (two years)

Director: Zeruesenay Desta, PhD, and Michael Eadon, MD

Disease and Therapeutic Response Modeling Program

Director: Sara Quinney, PharmD, PhD

Research

Areas of Excellence: Pharmacogenomics; translational research in drug response; drug metabolism and interactions; disease and therapeutic response modeling; therapeutic discovery and development; understudied populations

Goals Strengthening existing areas of expertise, and expanding into new areas that have major unmet clinical needs. Continued focus on the discovery and implementation of genomic medicine work, which includes increasing the clinical use of pharmacogenomic testing, discovering novel pharmacogenomic variants, and understanding the functional significance of these variants and their underlying mechanisms. Continuing to elucidate the basic mechanisms that regulate the metabolism and elimination of drugs through the liver and kidney. Continuing efforts in discovering drugs to prevent and treat Alzheimer's disease. Expanding disease and therapeutic modeling efforts across a variety of diseases, which means increasing the use of large datasets, such as whole genome and exome sequencing data, and outcomes data from electronic health records. Many of these efforts will continue to focus on populations that have been historically underrepresented in research, such as children, pregnant people, and those belonging to racial and ethnic minority groups.

DIVISION OF ENDOCRINOLOGY AND METABOLISM



FACULTY
IDENTIFYING
AS FEMALE

FULL-TIME
FACULTY

21

11

PART-TIME/
AFFILIATE FACULTY

Demographics

Faculty
Underrepresented
in Medicine: 0

Fellows: 6

IU Staff: 17

IU Health Staff: 62

IU Health APPs: 3



LEADERSHIP & ADMINISTRATION

MICHAEL ECONS, MD
Distinguished Professor
of Medicine
Division Director

MELISSA CAVAGHAN, MD
Associate Professor of
Clinical Medicine
Service Line Leader

LESLIE MILLER
Division Administrator

TONYA SOMERS
Service Line Administrator

Research

Areas of Excellence: diabetes, obesity, metabolic bone disease, and rare metabolic disease research; developing strength in pituitary disease. The division's diabetes research spans from cell culture and animal model studies, to clinical research to community focused research. Its research in metabolic bone and mineral disorders involves cell culture, animal models, clinical research and informatic studies using the Indiana Network for Patient Care.

ASSOCIATED RESEARCH CENTERS

Center for Diabetes and
Metabolic Diseases
*Director: Carmella Evans-
Molina, MD, PhD*
Indiana Center for
Musculoskeletal Health

NOTABLE PUBLICATIONS

Donegan D, Saeed Z, Delivanis DA, Murad MH, Honegger J, Amereller F, Oguz SH, Erickson D, Bancos I. Outcomes of Initial Management Strategies in Patients With Autoimmune Lymphocytic Hypophysitis: A Systematic Review and Meta-analysis. *J Clin Endocrinol Metab.* 2022 Mar 24;107(4):1170-1190. doi: 10.1210/clinem/dgab839. PMID: 35137155; PMCID: PMC8947799.

Weber TJ, Imel EA, Carpenter TO, Peacock M, Portale AA, Hetzer J, Merritt JL, Insogna K. Long-term Burosumab Administration Is Safe and Effective in Adults With X-linked Hypophosphatemia. *J Clin Endocrinol Metab.* 2022 Dec 17;108(1):155-165. doi: 10.1210/clinem/dgac518. PMID: 36072994; PMCID: PMC9759172.

Econs MJ, Selen DJ, Balza R, Zurkiya O, Kronenberg HM, Hung YP. Case 18-2022: A 29-Year-Old Woman with Recurrent Fractures. *N Engl J Med.* 2022 Jun 16;386(24):2316-2326. doi: 10.1056/NEJMcpc2107348. PMID: 35704485.

Featured Faculty

ZEB SAAED, MD
Assistant Professor
of Clinical Medicine

- Associate Fellowship Director in 2023
- Serves as Associate Clerkship Director for Phase 2 (MS3) with focus on curriculum development
- Received the Outstanding Clinical Teaching Award in Internal Medicine by the class of 2022
- Grant submitted to National Board of Medical Examiners (NBME) Stemmler Fund on learner assessment

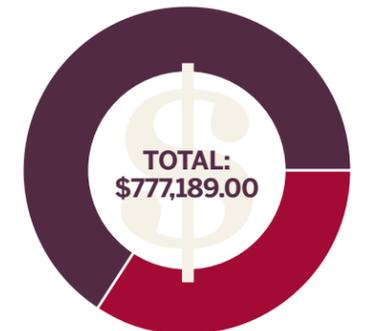
ERIK IMEL, MD
Professor Medicine

- Co-Chair of the 2022 Pre-Meeting Symposium for the American Society for Bone and Mineral Research (ASBMR)
- Recognized for his ongoing research in musculoskeletal health informatics, research in rare bone diseases, and in clinical research protocols

CARMELLA EVANS-MOLINA, MD, PHD
Professor of Medicine

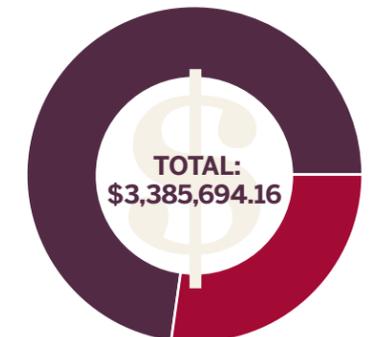
- Lauded for her broad use of cell biology, animal models, and human studies to study the pathogenesis of Type 1 and Type 2 Diabetes, in addition to clinical validation of biomarkers and target identification in clinical trials of disease modifying therapies

TOTAL NIH AWARD
DOLLARS (FY 22)



INDIRECT:
\$267,980.00

TOTAL AWARD
DOLLARS (FY 22)



INDIRECT:
\$924,743.04

Clinical

Areas of Excellence: robust clinical service focused on patients with diabetes, thyroid disease, metabolic bone disease, pituitary and adrenal disorders; catchment area covers the entire state of Indiana and, for rare disorders, extends well beyond the state

Education

Areas of Excellence: leadership in the Endocrine, Reproductive, Musculoskeletal, and Dermatologic Systems course for second year medical students and very active endocrine rotations for students and residents; very high caliber of fellows; very active conference schedule with three weekly conferences (endocrine grand rounds, endocrine case conference, and metabolic bone case conference); research conference for all diabetes investigators through the Diabetes Center

FELLOWSHIPS

Endocrinology, Diabetes, and
Metabolism Fellowship (two years)
Director: Amale A. Lteif, MD

KEY CLINICAL EDUCATOR

Zeb Saeed, MD
Assistant Professor of Clinical
Medicine

Goals The division plans to expand diabetes research, both basic and clinical, by recruiting new faculty. It will also recruit new faculty and involve more existing faculty in other areas of research.

STORIES FROM THE DEPARTMENT OF MEDICINE BLOG

May 31, 2022 | <https://medicine.iu.edu/blogs/the-beat/earlycareerspotlight-khare>

EARLY CAREER SPOTLIGHT: SWAPNIL KHARE, MD



Swapnil Khare, MD, is a clinician-scientist with certification in Internal Medicine and Endocrinology, Diabetes and Metabolism. Her area of interest is diabetes, with special focus on care delivery systems.

“The field of endocrinology is thought-provoking, and continues to evolve with new understanding of disease process and treatment modalities,” Khare said.

Khare joined Indiana University in 2016 as Assistant Professor of Clinical Medicine and has worked closely with IU School of Medicine’s Adult Cystic Fibrosis Center. She received the prestigious ENVISION II grant from the Cystic Fibrosis Foundation. Her efforts led to the establishment of a dedicated endocrine clinic for patients with cystic fibrosis, drastically reducing patients’ wait times.

“Interacting with patients, understanding their struggles, and developing tailored plans to help them excites me the most [about my work],” Khare said, particularly when she has the opportunity to innovate new systems.

As the inpatient diabetes director, she has tirelessly worked on improving diabetes care at the Adult Academic Health Center (AAHC). During COVID-19 pandemic, she started a pilot project for monitoring blood glucose using

continuous glucose monitoring (CGM), which meant nurses needed to enter patients’ rooms less frequently. This decreased their exposure to the virus, and helped conserve personal protective equipment.

Khare’s CGM project was so successful that she extended it to cystic fibrosis patients—and this was a “game-changer” for them, said Michael Econs, MD, director of the Division of Endocrinology.

“Dr. Khare is now working on getting this technology to other parts of our hospital. Her efforts have substantially improved our care,” he said.

Currently, Khare is working on the integration of Core Diabetes Application (CDA) at AAHC. CDA is a software which helps to standardize diabetes care, including insulin dose calculation and helps integrate diabetes management among care teams.

Khare is also excited to be a part of the Advanced Scholar Program for Internists in Research and Education (ASPIRE). As an ASPIRE scholar, she will spearhead a research project integrating CGM for diabetes care for patients during hospitalization.

For more stories from the Department of Medicine, visit medicine.iu.edu/blogs/the-beat.

GASTROENTEROLOGY/HEPATOLOGY



LEADERSHIP & ADMINISTRATION

MOHAMMAD AL-HADDAD, MD
Professor of Medicine
Naga P. Chalasani Professor
of Gastroenterology and
Hepatology
Division Director

ROBERT SIWIEC, MD
Assistant Professor of
Clinical Medicine
Interim Service Line Leader

CHELSIE WILLOUGHBY
Division Administrator

HOLLIE MAYES
Service Line Administrator



FULL-TIME
FACULTY

72

8

PART-TIME/
AFFILIATE FACULTY

Demographics



FACULTY
IDENTIFYING
AS FEMALE

Faculty
Underrepresented
in Medicine: 6

Fellows: 18

IU Staff: 86

IU Health Staff: 75

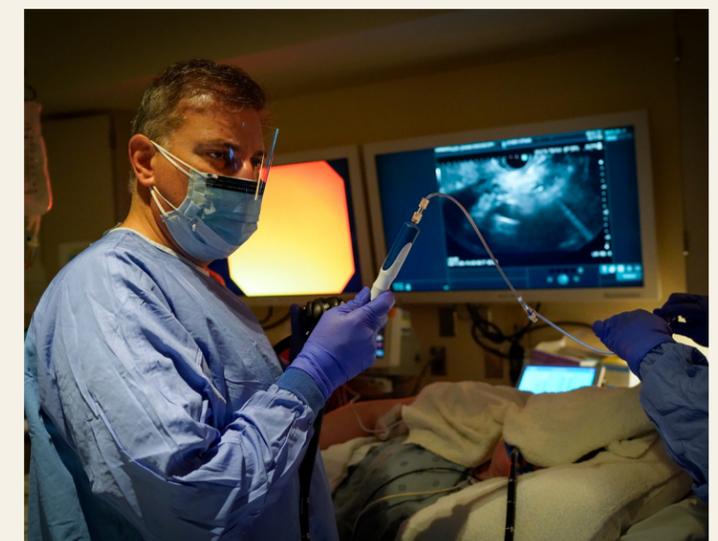
IU Health APPs: 16

Clinical

Areas of Excellence: pancreaticobiliary disease and advanced endoscopy (including ERCP, EUS & Advanced luminal); motility and gastroenterology; inflammatory bowel disease; colorectal cancer; liver disease

Education

Areas of Excellence: inpatient and outpatient settings, covering the various aspects of general gastroenterology, inflammatory bowel disease, motility disorders, pancreaticobiliary diseases and liver diseases; fellows experience a minimum of 5 dedicated months to research and gain a large experience in managing transplant patients, including liver transplant and multivisceral transplant, and their endoscopy experience exceeds national requirements both in quantity and nature of procedures



**TOTAL NIH AWARD
DOLLARS (FY 22)**



**INDIRECT:
\$1,841,420**

**TOTAL AWARD
DOLLARS (FY 22)**



**INDIRECT:
\$3,271,509**

FELLOWSHIPS

Gastroenterology and Hepatology Fellowship (three years)

Director: Nabil Fayad, MD

Advanced Endoscopy Fellowship (one year)

Director: Jeffrey Easler, MD

Clinician Educator Training Pathway (one year)

Director: Christen Dilly, MD

Hepatology Research Fellowship (two years)

Director: Samer Gawrieh, MD

KEY CLINICAL EDUCATORS

Christen Dilly, MD
Associate Professor of Medicine
Assistant Dean for Graduate Medical Education

Umer Bhatti, MD
Assistant Professor of Clinical Medicine

Research

Areas of Excellence: pancreatobiliary disease; device and new endoscopic procedures; motility/neurogastroenterology; inflammatory bowel disease; colorectal cancer; obesity and nutrition; fatty liver disease; alcoholic liver disease; drug induced liver injury; cholestatic liver disease; autoimmune hepatitis; cirrhosis complications and outcomes; liver transplantation; basic research in hepatology

ASSOCIATED RESEARCH CENTERS

Indiana Center for Liver Research
Director: Gianfranco Alpini, PhD

NOTABLE PUBLICATIONS

Imperiale TF. Colorectal cancer screening offering colonoscopy and FIT vs. colonoscopy alone improved participation. *Ann Intern Med.* 2021 Jul;174(7):JC76. doi: 10.7326/ACPJ202107200-076. Epub 2021 Jul 6. PMID: 34224268.

Vuppalachchi R, Caldwell SH, Pyrsopoulos N, deLemos AS, Rossi S, Levy C, Goldberg DS, Mena EA, Sheikh A, Ravinuthala R, Shaikh F, Bainbridge JD, Parmar DV, Chalasani NP. Proof-of-concept study to evaluate the safety and efficacy of saroglitazar in patients with primary biliary cholangitis. *J Hepatol.* 2022 Jan;76(1):75-85. doi: 10.1016/j.jhep.2021.08.025. Epub 2021 Sep 4. PMID: 34487750.

Gawrieh S, Nouredin M, Loo N, Mohseni R, Awasty V, Cusi K, Kowdley KV, Lai M, Schiff E, Parmar D, Patel P, Chalasani N. Saroglitazar, a PPAR- / Agonist, for Treatment of NAFLD: A Randomized Controlled Double-Blind Phase 2 Trial. *Hepatology.* 2021 Oct;74(4):1809-1824. doi: 10.1002/hep.31843. Epub 2021 Jul 19. PMID: 33811367.

**Additional
Leadership Roles**

Christen Dilly, MD
Assistant Dean for Graduate Medical Education

Naga Chalasani, MD
Vice President of Academic Affairs for IU Health

Suthat Liangpunsakul, MD, MPH
Chair of P&T Committee

Lauren Nephew, MD
Associate Vice Chair for Health Equity, Department of Medicine)

Ashley Gilmore, MD
Assistant Vice Chair for Health Equity, Department of Medicine

Charles Kahi, MD
Editor in Chief of Clinical Gastroenterology and Hepatology

Mohammad Al-Haddad, MD
Assoc. Editor of Clinical Gastroenterology and Hepatology

Suthat Liangpunsakul, MD, MPH
Associate Editor of Hepatology

Douglas Rex, MD
President of the American Society of Gastrointestinal Endoscopy (ASGE) (through May 2022)

Featured Faculty

THOMAS IMPERIALE, MD
Lawrence Lumeng Professor of Gastroenterology and Hepatology

- Named Distinguished Professor in March 2022

STUART SHERMAN, MD
Glen A. Lehman Professor of Gastroenterology

- Leads the flagship Advanced Endoscopy Program
- Selected to be the recipient of the American Society for Gastrointestinal Endoscopy's Rudolf Schindler Award in 2023

Goals The division will continue to grow a world-renowned faculty group and further diversify recruitments for the best and brightest GI and Liver faculty nationwide; increase extramural funding through federal and federal passthrough sources contributing to the school's increased rank in US News & World Report; continue to be one of the most sought-after programs by incoming fellows, and grow the fellowship programs through innovative curriculum that will prepare graduating fellows for clinical excellence & leadership across the country.

GENERAL INTERNAL MEDICINE & GERIATRICS



LEADERSHIP & ADMINISTRATION

GREG SACHS, MD
Department of Medicine Professor
of Health Research
Professor of Medicine
Professor of Neurology
Division Director

AREEBA KARA, MD, MS, FACP, SFHM
Associate Professor of Clinical Medicine
Associate Division Director

CATHY SCHUBERT, MD, AGSF, FACP
Mary Elizabeth Mitchell Professor of
Geriatrics
Section Director, IU Geriatrics

ALEXIA TORKE, MD, MS
Professor of Medicine
Section Director, Palliative Medicine

DAVID BOSE, MD
Assistant Professor of Clinical Medicine
Service Line Leader, Geriatrics

DARREN CAUDILL, DO
Assistant Professor of Clinical Medicine
Service Line Leader, Hospitalists

SHILPEE SINHA, MD
Assistant Professor of Clinical Medicine
Service Line Leader, Palliative Care

NICOLE FOWLER, PHD, MHSA
Associate Professor of Medicine
Director of Research

LAURA BERGDOLL, MS, CRA
Division Administrator

JENNIFER GROSS, MHA, MSN, RN
Service Line Administrator, Geriatrics

MELISSA MAYORGA, MHA
Service Line Administrator, Hospitalists

JIM LUCE, MSW
Service Line Administrator,
Palliative Care

FULL-TIME FACULTY **146**

PART-TIME/
AFFILIATE FACULTY **195**



FACULTY
IDENTIFYING
AS FEMALE

Faculty
Underrepresented
in Medicine: **31**

Fellows: **4**

IU Staff: **25**

IU Health Staff: **50**

IU Health APPs: **79**

Demographics

Clinical

Areas of Excellence: clinical faculty practice superior ambulatory care, hospital medicine, palliative medicine and geriatrics at several different hospitals and health systems. IU Geriatrics was designated as “high performing” by US News & World Report in 2022, the only Indiana-based geriatrics program to receive this designation. Hospitalists deliver excellent care and place a premium on communication and collaboration for complex patients. The division has seen significant growth in palliative care and this year launched a virtual palliative care hub to extend the reach of palliative medicine across Indiana.

Education

Areas of Excellence: provider of major volumes of high quality teaching all phases of MS curriculum on variety of topics (including ethics) and clinical settings, including continuity clinics and hospitalist ward teams; residents participate in required rotations in both geriatrics and palliative medicine; faculty are regular winners of teaching awards

KEY CLINICAL EDUCATORS

Geriatrics
Glenda Westmoreland, MD

Hospitalists
Richa Gupta, MD
Rachel Peterson, MD

Palliative Care
Amy Johnson, DO

FELLOWSHIPS

Geriatrics Fellowship (one year)
Director: Felipe Perez, MD

Hospice & Palliative Medicine
Fellowship (one year)
Director: Lyle Fettig, MD

Joint Geriatrics-Hospice & Palliative
Medicine Fellowship (two years)
Director: Felipe Perez, MD

VA Health Services Research and
Development Advanced Fellowship
Program (two years)

FEDERAL TRAINING GRANT

“Training the Next Generation of
Social and Behavioral Physician-
Scientists in ADRD: The Indiana ADRD
Medical Scientist Training Program”
(T32AG074934).

Trainees are MD-PhD students who are receiving the knowledge, skills, and methodological training needed to conduct innovative ADRD social and behavioral research involving patients or involving material related to patients.

FACULTY LEADERS IN EDUCATION

Glenda Westmoreland, MD
Statewide Communications
Competency Director for
Interpersonal and
Communication Skills
Interim Statewide Competency
Director for Patient Care and
Professionalism

Neeta Agarwal, MD
Statewide Course Director, FCP1

LeeAnn Cox, MD
Statewide Medicine Clerkship
Director

R. Toan Vu, MD
Program Director, Sub-Internship
Clerkship in Internal Medicine

Jennifer Hur, MD
Program Director, Internal Medical
Residency Program (Indianapolis)

Julie Vannerson, MD
Associate Program Director, Internal
Medical Residency Program
(Indianapolis)

Curtis Wright, MD
Associate Program Director, Internal
Medical Residency Program
(Indianapolis)

Noelle Sinex, MD
Associate Program Director, Internal
Medical Residency Program
(Indianapolis)

Allyson Thomas, MD
Associate Program Director, Methodist
(Indianapolis)

Research

Areas of Excellence: Alzheimer’s Disease and Related Dementias (ADRD); quality of care for older adults and family caregivers; cancer survivorship (Symptom management and survivorship); health care decision making/advanced care planning; ethics; health inequities clinical informatics; health services research; implementation science; symptom management

ASSOCIATED RESEARCH CENTERS

Indiana University Center for Bioethics
Director: Peter Schwartz, MD

RESPECT Center (Research in
Palliative & End-of-life
Communication and Training)
Co-Directors: Susan Hickman, PhD;
Greg Sachs, MD; Alexia Torke, MD

Indiana University Center for
Aging Research (IUCAR – with
Regenstrief Institute)
Director: Susan Hickman, PhD

William M. Tierney Center for
Health Services Research
(Regenstrief Institute)
Director: David Haggstrom, MD

TOTAL NIH AWARD
DOLLARS (FY 22)



TOTAL AWARD
DOLLARS (FY 22)



Center for Biomedical Informatics (Regenstrief Institute)
Interim Director: Brian Dixon, PhD, MPA, FACMI, FHIMSS, FAMIA

Center for Health Innovation and Implementation Science (CHIIS)
Director: Malaz Boustani, MD, MPH

VA Health Services Research & Development Center for Health Information and Communication
Director: Michael Weiner, MD, MPH

NOTABLE PUBLICATIONS

Sabbagh MN, Perez A, Holland TM, Boustani M, Peabody SR, Yaffe K, Bruno M, Paulsen R, O'Brien K, Wahid N, Tanzi RE. Primary prevention recommendations to reduce the risk of cognitive decline. *Alzheimers Dement.* 2022 Aug;18(8):1569-1579. doi: 10.1002/alz.12535. Epub 2022 Jan 13. PMID: 35026040; PMCID: PMC9545398.

Kroenke K, Gao S, Mosesso KM, Hickman SE, Holtz LR, Torke AM, Johnson NM, Sachs GA. Prevalence and Predictors of Symptoms in Persons with Advanced Dementia Living in the Community. *J Palliat Med.* 2022 Sep;25(9):1376-1385. doi: 10.1089/jpm.2021.0402. Epub 2022 Mar 29. PMID: 35357951; PMCID: PMC9492904.

Lee JL, Huffman M, Rattray NA, Carnahan JL, Fortenberry JD, Fogel JM, Weiner M, Matthias MS. "I Don't Want to Spend the Rest of my Life Only Going to a Gender Wellness Clinic": Healthcare Experiences of Patients of a Comprehensive Transgender Clinic. *J Gen Intern Med.* 2022 Oct;37(13):3396-3403. doi: 10.1007/s11606-022-07408-5. Epub 2022 Feb 2. PMID: 35112278; PMCID: PMC8809217.

Additional Leadership Roles

Malaz Boustani, MD, MPH
 Founding Director/Chief Innovation and Impelentation Officer, Sandra Eskenazi Center for Brain Care Innovation

Joy Lee, PhD
 Scientific Director, WISE Indiana (CTSI)

Sylk Sotto, EdD, MBA, MPS
 Vice Chair for Faculty Affairs and Professional Development, Department of Medicine
 Vice Chair for Diversity, Health Equity, and Inclusion, Department of Medicine
 Director, All IN For Health (Indiana CTSI)
 Co-Director, Indiana CTSI Workforce Development
 Health Equity Liaison/Lead, IU Simon Comprehensive Cancer Center, Office of Community Outreach and Engagement

Sacha Sharp, PhD
 Co-Chair, Diversity Council at IU School of Medicine

Chris Callahan, MD
 Chief Research & Development Office, Eskenazi Health

Titus Schleyer, PhD
 Program Director, Learning Health Systems Informatics (IU Health/Regenstrief)

Steven Counsell, MD
 Medical Director, Division of Aging, Family and Social Services Administration

Alexia Torke, MD
 Director, Daniel F. Evans Center for Spiritual and Religious Values in Healthcare (IU Health)

Amy Munchhof, MD, PhD
 President-Elect, Midwest Society for General Internal Medicine

Brad Sutter, MD
 Governor, American College of Physicians-Indiana Chapter
 Interim Vice Chair for Clinical Affairs, Department of Medicine

Dee Monesighe, MD
 Governor-Elect, American College of Physicians-Indiana Chapter

Areeba Kara, MD
 Lead, Hospital Medicine ReEngineering Network (HOMERuN) antiracism workgroup
 Co-Lead, Society of Hospital Medicine Diversity, Equity, and Inclusion Special Interest Group

Featured Faculty

NICOLE FOWLER, PHD
 Associate Professor of Medicine

- Excellence in general research effort

MALAZ BOUSTANI, MD, MPH
 Richard M. Fairbanks Professor of Aging Research

- CHIIS certificate efforts
- Excellence in general research effort

Goals Continued strategic recruitment of additional research faculty in key areas (i.e., palliative care, HSR, DEI); build faculty development programming that is pertinent to clinicians, scholars, QI experts, advocates and educators; evaluate processes and policies to consider inclusion, equity, diversity and justice.

HEMATOLOGY/ONCOLOGY



LEADERSHIP & ADMINISTRATION

KELVIN LEE, MD
 HH Gregg Professor of Oncology; Professor of Medicine
 Interim Director, Division of Hematology/Oncology
 Director, IU Simon Comprehensive Cancer Center
 Associate Dean for Cancer Research

NASSER HANNA, MD
 Tom and Julie Wood Family Foundation Professor of Lung Cancer Clinical Research
 Associate Division Director
 Service Line Leader

RAKESH MEHTA, MD
 Associate Professor of Clinical Medicine
 Associate Division Director

KATHY MILLER, MD
 Ballvé Lantero Professor of Oncology
 Assistant Division Director

ELSAYED ALY, MD
 Assistant Professor of Clinical Medicine
 Service Line Leader

KATIE ROBINSON
 Division Administrator

NAUREEN AHMED
 Service Line Administrator

SABRINA HETZEL
 Human Resources Business Partner

Demographics

FULL-TIME FACULTY

78

29

PART-TIME/
AFFILIATE FACULTY



FACULTY IDENTIFYING AS FEMALE

Faculty Underrepresented in Medicine: 4

Fellows: 16

IU Staff: 37

IU Health Staff: 15

IU Health APPs: 14

Clinical

Areas of Excellence: cancer prevention, particularly in testicular and germ cell cancers, led by Dr. Lawrence Einhorn (who pioneered the use of chemotherapy for curative intent in testicular cancer, and is widely considered the world's expert in this cancer); thymic malignancies; breast cancer; and pancreatic cancer. Additionally, the division administers the Cancer Prevention Clinic, which provides a medical home for persons with a known increased risk for developing cancer, and the Rapid Diagnostic Clinic, which provides access to an Advanced Practice Provider who can further facilitate a patient's work-up for a suspected malignancy or hematologic disorder.

Education

Areas of Excellence: providing outstanding fellowship training in Hematology/Oncology, with the laboratory-based faculty additionally highly involved in graduate and postdoctoral training across a wide range of disciplines in the Graduate School.

**TOTAL NIH AWARD
DOLLARS (FY 22)**



INDIRECT:
\$2,686,045.15

**TOTAL AWARD
DOLLARS (FY 22)**



INDIRECT:
\$8,823,512.05

FELLOWSHIP

Hematology/Oncology
Fellowship (three years)
Director: Ahmad Al-Hader, MD

KEY CLINICAL EDUCATOR

Naveen Manchanda, MD
Associate Professor of
Clinical Medicine

Research

Areas of Excellence: research in the division is closely tied to the research Programs in the IU Simon Comprehensive Cancer Center (IUSCCC), which is an NCI-designated Comprehensive Cancer Center as well as a member of the National Comprehensive Cancer Network (NCCN). Division members are very closely involved in all 4 of IUSCCC Research Programs: the Cancer Prevention and Control Program (CPC); the Experimental and Developmental Therapeutics Program (EDT); the Hematopoiesis and Hematologic Malignancies Program (HHM); the Tumor Microenvironment and Metastasis Program (TMM); and Global Oncology.

NOTABLE PUBLICATIONS

A. Sudha P, Ahsan A, Ashby C, Kausar T, Khera A, Kazeroun MH, Hsu CC, Wang L, Fitzsimons E, Salminen O, Blaney P, Czader M, Williams J, Abu Zaid MI, Ansari-Pour N, Yong KL, van Rhee F, Pierceall WE, Morgan GJ, Flynt E, Gooding S, Abonour R, Ramasamy K, Thakurta A, Walker BA. Myeloma Genome Project Panel is a Comprehensive Targeted Genomics Panel for Molecular Profiling of Patients with Multiple Myeloma. *Clin Cancer Res.* 2022 Jul 1;28(13):2854-2864 PMID: 35522533 (IF 50.1)

B. Tachibana I, Kern SQ, Douglawi A, Tong Y, Mahmoud M, Masterson TA, Adra N, Foster RS, Einhorn LH, Cary C. Primary Retroperitoneal Lymph Node Dissection for Patients With Pathologic Stage II Nonseminomatous Germ Cell Tumor-N1, N2, and N3 Disease: Is Adjuvant Chemotherapy Necessary? *J Clin Oncol.* 2022 Nov 10;40(32):3762-3769. PMID: 35675585 (IF 89). All the investigators on this publication are from IU.

C. Ballinger TJ, Jiang G, Shen F, Miller KD, Sledge GW Jr, Schneider BP. Impact of African ancestry on the relationship between body mass index and survival in an early-stage breast cancer trial (ECOG-ACRIN E5103). *Cancer.* 2022 Jun 1;128(11):2174-2181. PMID: 35285940 (IF 27.4)

**ASSOCIATED RESEARCH
CENTERS**

- IU Simon Comprehensive Cancer Center
- IU Cancer Institute
- Vera Bradley Foundation Center for Breast Cancer Research
- IU Sickle Cell Disease Center of Excellence
- Supportive Oncology Center of Excellence

**Additional
Leadership Roles**

Jennifer Schwartz, MD
Assistant Dean for Curriculum;
Director of Phase 2

Rakesh Mehta, MD
Vice Chair for Education,
Department of Medicine

Huda Salman, MD, PhD
Director, Brown Center for
Immunotherapy
Co-leader Hematopoiesis and
Hematological Malignancies
Program

Kelvin Lee, MD
Director, IU Simon Comprehensive
Cancer Center and Associate Dean
of Cancer Research
Board Member, National
Comprehensive Cancer Network

Patrick Loehrer, MD
Director of Global Oncology
(AMPATH)

Mat Opyrchal, MD, PhD
Co-leader Experimental and
Developmental Therapeutics
Program (IUSCCC)

Kathy Miller, MD
Associate Director of Clinical
Research (IUSCCC)
Deputy Editor Journal of
Clinical Oncology

Patrick Loehrer, MD
Special Assistant to the Director,
Center for Global Health, National
Cancer Institute

Featured Faculty

TARAH BALLINGER, MD
**Assistant Professor of Clinical
Medicine**

- Recently named Vera Bradley Foundation Scholar in Breast Cancer Research
- Recognized for establishing the Multidisciplinary Oncology Vitality and Exercise (MOVE) program, which gives breast cancer patients a personalized plan for exercise and physical therapy throughout all stages of their cancer journey

Goals Over the last year, the division has undergone very substantial growth in the clinical realm and in research—it has increased its faculty and staff, as well as the scope of its efforts. One major goal for 2023 is to consolidate and integrate these efforts for long term success. A second major goal is to recruit an outstanding new director to lead the division.

INFECTIOUS DISEASES

Faculty
Underrepresented
in Medicine: **4**

Fellows: **6**

IU Staff: **28**

IU Health Staff: **11**

IU Health APPs: **4**



FACULTY
IDENTIFYING
AS FEMALE

Demographics



FULL-TIME
FACULTY

33

13

PART-TIME/
AFFILIATE FACULTY



LEADERSHIP & ADMINISTRATION

SAMIR GUPTA, MD
David H. Jacobs Professor of
Infectious Diseases
Division Director

AARON ERMEL, MD
Assistant Professor of Clinical
Medicine
Service Line Leader

RAVI MISRA, MD
Assistant Professor of Clinical
Medicine
Service Line Leader

ANDREA JOHNSON
Division Administrator

MAGGIE BENNETT
Service Line Administrator

NOTABLE PUBLICATIONS

Geisler WM, Hocking JS, Darville T, Batteiger BE, Brunham RC. Diagnosis and Management of Uncomplicated Chlamydia trachomatis Infections in Adolescents and Adults: Summary of Evidence Reviewed for the 2021 Centers for Disease Control and Prevention Sexually Transmitted Infections Treatment Guidelines. Clin Infect Dis. 2022 Apr 13;74(Suppl_2):S112-S126. doi: 10.1093/cid/ciac126. PMID: 35416965; PMCID: PMC9006972.

Bourgi K, Kundu S, Stewart JC, So-Armah K, Freiberg M, Gupta SK. Associations of HIV and Depression with Incident Diabetes Mellitus: Veterans Aging Cohort Study. Clin Infect Dis. 2022 Feb 3;ciac085. doi: 10.1093/cid/ciac085. Epub ahead of print. PMID: 35134838.

Aronoff DM, Marrazzo JM. Infections caused by Clostridium perfringens and Paenoclostridium sordellii after unsafe abortion. Lancet Infect Dis. 2023 Feb;23(2):e48-e55. doi: 10.1016/S1473-3099(22)00590-4. Epub 2022 Sep 22. Erratum in: Lancet Infect Dis. 2022 Nov;22(11):e310. PMID: 36155670.

ASSOCIATED RESEARCH CENTERS

IU Center for Global Health
Center for HPV Research

Additional Leadership Roles

David Aronoff, MD
Chair, Department of Medicine

Bradley L. Allen, MD PhD
Senior Associate Dean for Medical
Student Education

Haley Pritchard, MD
Associate 3rd Year Internal Medicine
Clerkship Director

Virginia A. Caine, MD
Marion County Public Health
Department Director

Adrian Gardner, MD
Associate Dean for Global Health,
Director IU Center for Global Health

Kara K. Wools-Kaloustian, MD
Research Director, IU Center for
Global Health
Vice Chair for Research, Department
of Medicine

Lindsey J. Reese, MD
Executive Physician Director for
Population Health (IU Health)

Bree A. Weaver, MD
Chief of Medicine, Eskenazi Health

Featured Faculty

CHRISTINE HEUMANN, MPH, MD
Assistant Professor of
Clinical Medicine
• Medical Director for the Bell
Flower Clinic

AARON ERMEL, MD
Assistant Professor of Clinical
Medicine
• ID Academic Service Line Leader
and Director of the IU Infectious
Diseases Laboratory

These faculty members led the division's response in addressing the mpox outbreak in 2022. Together with other valued members of the division, this group met the challenge of yet another unexpected global health outbreak that directly impacted the Indianapolis community.

TOTAL NIH AWARD
DOLLARS (FY 22)



INDIRECT:
\$1,149,184.00

TOTAL AWARD
DOLLARS (FY 22)



INDIRECT:
\$2,008,588.85

FELLOWSHIPS

Infectious Diseases Fellowship
(two years)
Director: Saira Butt, MD

Combined Med/Peds Infectious
Diseases Fellowship (four years)

Research

Areas of Excellence: sexually
transmitted infections; HIV; global
health implementation science;
reproductive health

Clinical

Areas of Excellence: HIV care; expertise in non-tuberculous mycobacterium; transplant and immunosuppressed infectious diseases care; care of sexually transmitted infections and a broad range of infectious diseases in inpatient and outpatient settings

Education

Areas of Excellence: the fellowship program offers an excellent opportunity to choose and focus on one of the various different infectious diseases tracks (infection prevention, antimicrobial stewardship, medical education, global health, etc.); this unique set up helps the fellows succeed in their chosen clinical infectious diseases career

Goals To develop a Transplant Infectious Diseases Section and Center of Excellence which will grow the division's clinical and research interests in this important field; to expand the division's basic science research portfolio with additional physician-scientists focused on new discoveries to reduce communicable diseases



FACULTY
IDENTIFYING
AS FEMALE

Faculty
Underrepresented
in Medicine: **6**

Fellows: **12**

IU Staff: **19**

IU Health Staff: **11**

IU Health APPs: **9**

Demographics

FULL-TIME FACULTY **52**

7 PART-TIME/
AFFILIATE FACULTY



Clinical

Areas of Excellence: dialysis, including home therapies; chronic kidney disease; glomerulonephritis; polycystic kidney disease; genetic disorders; diabetic and all causes of kidney disease; prevention of kidney stones; difficult-to-control hypertension

Education

Areas of Excellence: diverse training in nephrology with sub-specialty nephrology care in transplant, home dialysis, hypertension, pharmacogenomics, kidney stone prevention, polycystic kidney disease, and glomerulonephritis; two blocks of Intercession training for intensive education and hands on experience during the first year of fellowship



LEADERSHIP & ADMINISTRATION

SHARON MOE, MD
Stuart A. Kleit Professor of
Nephrology
Division Director

BRENT MILLER, MD
Michael A. Kraus Home Dialysis
Professor of Nephrology
Service Line Leader

AMANDA GALBRAITH
Division Administrator

JEREMY HOUGH
Service Line Leader

FELLOWSHIPS

Nephrology Fellowship (two years)
*Director: Timothy A. Sutton,
MD, PhD*

Transplant Nephrology
Fellowship (one year)
Director: Asif A. Sharfuddin, MD

Advanced Home Dialysis
Fellowship (one year)
Director: Nupur Gupta, MD

KEY CLINICAL EDUCATOR

Key Clinical Educator:
Tim Sutton, MD, PhD

FEDERAL TRAINING GRANT

Indiana University Kidney Training Program (IU-KTP). A 2 year program, currently in year 4 of 5; PI is Dr. Sharon Moe

Research

Areas of Excellence: the Kidney Precision Medicine Program (KPMP) was one of five centers to be renewed for another five years; HubMap, the making of a Kidney Atlas in collaboration with Washington University; the Musculoskeletal Clinical Research Center recently renewed for another five years; and the Pediatric Center of Excellence in Nephrology, a collaboration with Washington University. The George O'Brien Kidney Center award is in its twentieth year.

ASSOCIATED RESEARCH CENTERS

Musculoskeletal Research Center
*Principal Investigator:
Sharon Moe, MD*

The O'Brien Kidney Center at
Indiana University
Director: Pierre C. Dagher, MD

NOTABLE PUBLICATIONS

Agarwal R, Sinha AD, Tu W. Chlorthalidone for Resistant Hypertension in Advanced Chronic Kidney Disease. *Circulation.* 2022 Aug 30;146(9):718-720. doi: 10.1161/CIRCULATIONAHA.122.060167. Epub 2022 Aug 29. PMID: 36037270; PMID: PMC9752356.

Melo Ferreira R, Sabo AR, Winfree S, Collins KS, Janosevic D, Gulbranson CJ, Cheng YH, Casbon L, Barwinska D, Ferkowicz MJ, Xuei X, Zhang C, Dunn KW, Kelly KJ, Sutton TA, Hato T, Dagher PC, El-Achkar TM, Eadon MT. Integration of spatial and single-cell transcriptomics localizes epithelial cell-immune cross-talk in kidney injury. *JCI Insight.* 2021 Jun 22;6(12):e147703. doi: 10.1172/jci.insight.147703. PMID: 34003797; PMID: PMC8262485.

LaFavers KA, Hage CA, Gaur V, Micanovic R, Hato T, Khan S, Winfree S, Doshi S, Moorthi RN, Twigg H, Wu XR, Dagher PC, Srour EF, El-Achkar TM. The kidney protects against sepsis by producing systemic uromodulin. *Am J Physiol Renal Physiol.* 2022 Aug 1;323(2):F212-F226. doi: 10.1152/ajprenal.00146.2022. Epub 2022 Jun 27. PMID: 35759740; PMID: PMC9359648.

Additional Leadership Roles

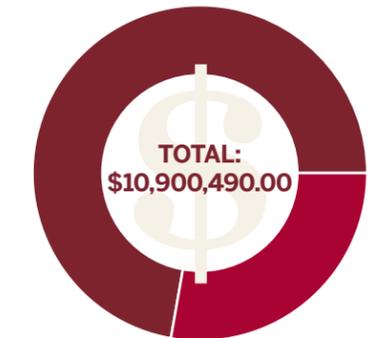
Sharon Moe, MD
Co-Director Indiana CTSI
Associate Dean for Clinical and
Translational Research
Co-Chair Gordon Research
Conference on Phosphate
Physiology

Tarek Ashkar, MD
Chair, Publications Committee,
American Society of Nephrology

Dennis Mishler, MD
President, National Kidney
Foundation of Indiana Medical
Advisory Board

Asif Sharfuddin, MD
Executive Committee, American
Society for Transplantation and
UNOS Kidney Committee

TOTAL NIH AWARD
DOLLARS (FY 22)



INDIRECT:
\$3,030,613.00

TOTAL AWARD
DOLLARS (FY 22)



INDIRECT:
\$3,277,126.00

Goals Integrate Point of Care Ultrasound (POCUS) into routine care; work closely with population health to reduce costs of caring for patients with kidney disease while improving care; work towards a Kidney Research Center of Excellence.

STORIES FROM THE NEWSROOM

April 27, 2022 | <https://medicine.iu.edu/news/2022/04/kidney-function-calculation-study>

TRANSLATIONAL RESEARCH LEADER SPEARHEADS EFFORT TO CHANGE KIDNEY FUNCTION CALCULATION TO REMOVE RACIAL VARIABLES



After a year of work to bring balance to an equation that measures kidney function by removing racial variables, Sharon Moe, MD, associate dean for clinical and translational medicine and director of the Division of Nephrology for Indiana University School of Medicine, is celebrating a nationally adopted change in how the glomerular filtration rate (GFR) is being calculated to improve patient lives.

The system-wide change for all patients over 18 years old was the result of collaborative work between Moe and other medical leaders in nephrology and Michelle Zimmerman, MD, of Indiana University Health. The calculation change went into effect March 30, 2022, for IU Health and goes into effect this month at Eskenazi Health.

A patient's GFR describes the quantity filtered through the kidney and into urine. For the past 50 years, the flow rate has had various formulas to estimate it, and the most commonly used has a variable based on race.

"Race is a social construct and not a biologic factor and thus, should be included in the GFR estimating equation," said Moe, who is also one of the co-directors of the Indiana Clinical and Translational Sciences Institute (CTSI). "This change now more accurately reflects the recommendations of national groups and substitutes the race variable with a numerical variable that was confirmed to reflect the gold standard measurement of GFR and does not include race."

The estimated GFR equation refit was developed with a diverse population and has acceptable performance characteristics. Patients in the IU Health system who are being seen for kidney function issues may see their GFR change in their portal due to the newly adopted calculations. Clinicians may also see GFRs change, requiring medication dosing adjustments or changes in kidney staging decisions.

IU School of Medicine students also strongly advocated for this change.

PULMONARY, CRITICAL CARE, SLEEP AND OCCUPATIONAL MEDICINE

Demographics

FULL-TIME FACULTY

62

PART-TIME/
AFFILIATE FACULTY

31



FACULTY IDENTIFYING AS FEMALE

Faculty Underrepresented in Medicine: 8

Fellows: 28

IU Staff: 25

IU Health Staff: 42

IU Health APPs: 23



LEADERSHIP & ADMINISTRATION

ROBERTO MACHADO, MD
Dr. Calvin H. English Professor
Division Director

SCOTT ROBERTS, MD
Assistant Professor of Medicine
Service Line Leader

CYNTHIA BROWN, MD
Professor of Clinical Medicine
Associate Service Line Leader
for Ambulatory Operations

HEATHER HENNER
Division Administrator

MEGAN DONOVAN
Service Line Administrator

Clinical

Areas of Excellence: interstitial and immunologic lung disease (including sarcoidosis, broncho-alveolar lavage analysis); lung transplant; pulmonary hypertension including CTEPH; adult cystic fibrosis; interventional pulmonology (including bronchoscopic lung volume reduction and complex airway interventions); neuromuscular lung disease; critical care, including cardiovascular, ECMO and neurocritical care; post-critical illness care ("survivor's clinic"); sleep disorders

Education

Areas of Excellence: the division boasts several nationally well-known medical educators, and has multiple fellows pursuing the Clinician Educator training pathway; additionally, faculty generally publish multiple papers per year in education topics

FELLOWSHIPS

Pulmonary-Critical Care Medicine (three years)
Critical Care Track (two years)
Director: Gabriel Bosslet, MD

Sleep Medicine (one year)
Director: Stephanie Stahl, MD

KEY CLINICAL EDUCATOR

Laura Hinkle, MD
Assistant Professor of Clinical Medicine

FEDERAL TRAINING GRANTS

T32: This training program in adult and pediatric pulmonary and critical care medicine trains new generations of learners to become outstanding researchers or entrepreneurs and to participate in novel pulmonary related research.

T35: The purpose of the Student Research Program in Academic Medicine (SPRAM) is to provide a structured environment that engages medical students' interest in biomedical, basic, and translational research, and education in research ethics.

Research

Areas of Excellence: cystic fibrosis; ICU brain dysfunction and recovery; sickle cell lung disease; interstitial lung disease; lung cancer pathobiology; lung immunology microbiome; and pulmonary hypertension

NOTABLE PUBLICATIONS

Boente RD, White EN, Baxter CM, Shore JE, Collard HR, Lee JS; PFF Best Practices Committee. Differences in Patient Outcomes across the Pulmonary Fibrosis Foundation Care Center Network. *Am J Respir Crit Care Med.* 2023 Jan 15;207(2):214-218. doi: 10.1161/rccm.202206-1173LE. PMID: 36107160.

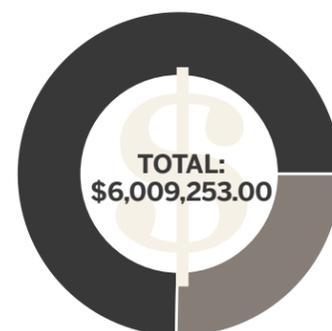
Aldred MA, Morrell NW, Guignabert C. New Mutations and Pathogenesis of Pulmonary Hypertension: Progress and Puzzles in Disease Pathogenesis. *Circ Res.* 2022 Apr 29;130(9):1365-1381. doi: 10.1161/CIRCRESAHA.122.320084. Epub 2022 Apr 28. PMID: 35482831.

Fu Y, Pajulas A, Wang J, Zhou B, Cannon A, Cheung CCL, Zhang J, Zhou H, Fisher AJ, Omstead DT, Khan S, Han L, Renauld JC, Paczesny S, Gao H, Liu Y, Yang L, Tighe RM, Licona-Limón P, Flavell RA, Takatsuka S, Kitamura D, Sun J, Bilgicer B, Sears CR, Yang K, Kaplan MH. Mouse pulmonary interstitial macrophages mediate the protumorigenic effects of IL-9. *Nat Commun.* 2022 Jul 1;13(1):3811. doi: 10.1038/s41467-022-31596-7. PMID: 35778404; PMCID: PMC9249769.

Bosslet GT, Pollak M, Jang JH, Roll R, Sperling M, Khan B. The Effect of In-Person Primary and Secondary School Instruction on County-Level Severe Acute Respiratory Syndrome Coronavirus 2 Spread in Indiana. *Clin Infect Dis.* 2022 Jan 7;74(1):17-23. doi: 10.1093/cid/ciab306. PMID: 33846706; PMCID: PMC8083360.

Khan SH, Lindroth H, Jawed Y, Wang S, Nasser J, Seyffert S, Naqvi K, Perkins AJ, Gao S, Kesler K, Khan B. Serum Biomarkers in Postoperative Delirium After Esophagectomy. *Ann Thorac Surg.* 2022 Mar;113(3):1000-1007. doi: 10.1016/j.athoracsur.2021.03.035. Epub 2021 Mar 25. PMID: 33774004; PMCID: PMC8582321.

TOTAL NIH AWARD DOLLARS (FY 22)



INDIRECT:
\$1,537,493.00

TOTAL AWARD DOLLARS (FY 22)



INDIRECT:
\$1,975,163.31

Additional Leadership Roles

W. Graham Carlos, MD
P1Y2 Course Site Leader

Laura Hinkle, MD
Sitewide Course Director (T3)

Gabriel Bosslet, MD
Assistant Dean for Faculty Affairs and Professional Development

Cynthia Brown, MD
Medical Director of the Clinical Research Centers (CRC)
Co-Chair, Women in Medicine and Science (WIMS), Department of Medicine

Francesca Duncan, MD
Co-Chair, Equity and Inclusion Committee, Department of Medicine

Featured Faculty

FRANCESCA DUNCAN, MD
Assistant Professor of Clinical Medicine

EDWIN JACKSON, DO, MBA
Assistant Professor of Clinical Medicine

- Drs. Duncan and Jackson were awarded a PRIME Grant Award to address disparities in lung cancer by creating an educational curriculum for trainees, PCPs, and community stakeholders
- Dr. Jackson was also awarded the Dexter Fellowship to build an UltraSound Core Program

SIKANDAR KHAN, DO
Assistant Professor of Medicine

- Received a K76 grant this year

ANGELIA LOCKETT, PHD
Assistant Research Professor of Medicine

- Received a KO1 grant this year

ANDREA FRUMP, PHD
Assistant Professor of Medicine

- Awarded an RO1 on her first submission

BABAR KHAN, MD
Professor of Medicine

- Named a Showalter Scholar

Goals Continue to identify and recruit high-impact scientists and physician-scientists to expand research portfolio in the areas of airway biology/asthma/immunology, lung fibrosis/repair/injury, pulmonary vascular disease, and critical illness translational/outcomes to strengthen ICU brain dysfunction/recovery program; build a more robust clinical trials operation within the division to be able to support additional clinical trials for all faculty and fellows; continue to recruit and support a diverse group of talented trainees, faculty, and staff while working to ensure that they all feel supported and have had time to process the past several years of intense work caring for COVID-19 patients

RHEUMATOLOGY



Faculty Underrepresented in Medicine: **3**
 Fellows: **4**
 IU Staff: **4**
 IU Health Staff: **14**
 IU Health APPs: **1**

13 FULL-TIME FACULTY

5 PART-TIME/ AFFILIATE FACULTY

12

FACULTY IDENTIFYING AS FEMALE

Demographics



LEADERSHIP & ADMINISTRATION

STEVEN HUGENBERG, MD
 Associate Professor of Clinical Medicine
 Division Director and Co-Service Line Leader
 Rheumatology Section Chief,
 Richard L. Roudebush VAMC

DAVID BATT, MD
 Assistant Professor of Clinical Medicine
 Co-Service Line Leader

LESLIE MILLER
 Division Administrator

TONYA SOMERS
 Service Line Administrator

FELLOWSHIP

Rheumatology Fellowship (two years)
 Director: Steven Hugenberg, MD

KEY CLINICAL EDUCATOR

Yamini Sachan, MBBS
 Assistant Professor of Clinical Medicine

Research

Areas of Excellence: Dr. Hugenberg participates in drug company studies, and he is also a sub-investigator in a Sjogren's syndrome study being done with the IU School of Dentistry and assisting the Department of Anesthesiology with an automated acupuncture study for fibromyalgia

Featured Faculty

DARSHINI VINOD, MBBS
 Assistant Professor of Clinical Medicine

- Directs the Rheumatology service at Eskenazi, and has expertly navigated the changes in scheduling requirements, improving patient satisfaction, and maintaining good access.

EMILY KITCHIN, MD
 Assistant Professor of Clinical Medicine

- Provides excellent care for complex patients—multiple referring providers have complemented her willingness to answer questions and provide guidance

Clinical

Areas of Excellence: general rheumatology—all faculty evaluate patients with any rheumatological condition, from the basic to the most complex, and provide inpatient consultations at the IUH AHC, Eskenazi and VA hospitals. Additionally, faculty administer musculoskeletal ultrasound for procedures and diagnosis, and the division also employs a nurse practitioner who sees patients with fibromyalgia

Education

Areas of Excellence: offers a high-quality fellowship program to train future rheumatologists, including an effective didactic program, as well as clinical experience at IU Health University Hospital, Eskenazi Health and the Richard L. Roudebush VAMC; additionally, the division is integrally involved in resident education, providing extensive outpatient clinical experience and a structured education program

Goals Expand performance of e-consults and review outpatient consultations so as to provide more timely care for patients who need and may benefit from the division's services; recruit new faculty with research interest and potential

A Fellowship to Remember a Heroic Patient

IU School of Medicine is known around the world for developing the chemotherapy regimen that raised the cure rate for metastatic testis cancer from 5 percent to 80 percent. The first person ever to be cured with it was John Cleland, who recently passed away—47 years after his initial cancer diagnosis. John agreed to try the new combination after previous efforts with other therapies failed. In his honor, we established the John Cleland Testis Cancer Fellowship Fund to promote ongoing training in testis cancer research among our fellow trainees. Since its creation in February, the fund has received 137 gifts and raised more than \$355,000.



A New Endowed Chair Honors Chalasani

For more than 25 years, Naga P. Chalasani, MD, has had a distinguished and influential career as a physician, scientist, mentor and leader. He served as chief of the Division of Gastroenterology and Hepatology from 2007 to 2020. And he served as interim chair of the Department of Medicine from 2020 to 2021. To honor that legacy, an endowed chair—the Naga P. Chalasani Chair in Gastroenterology and Hepatology—was established this year thanks to a \$2.3 million fundraising campaign.



A Cardiovascular Fellowship to Support Innovation

In March 2022, we welcomed the creation of the Gary and Kathy Anderson Cardiovascular Innovation Fellowship. Gary and Kathy are two stalwart IU supporters. Their generous gift will be used to support a fellowship in the Division of Cardiovascular Medicine, continuing to help IU attract talented fellows. The inaugural Anderson Innovation Fellow is Chirag Dipak Shah, MD, MPH, who will use machine learning and artificial intelligence to equip physicians with tools to better predict long-term morbidity and mortality.

A Fellowship Focused on Compassionate Care

For those who have been around IU cardiology for any length of time, the name Eric S. Williams, MD, MACC, is synonymous with outstanding care and teaching at the highest level. A professor of medicine at IU since 1985, he also served his profession through his leadership at the American College of Cardiology as chairman of the ACC's Competency Management Committee and a senior member of the Life-long Learning and Oversight Committee. So it is fitting that this year we created the Eric S. Williams, MD Cardiovascular Fellowship through a fundraising campaign with a goal of \$1 million. This endowed cardiovascular fellowship will focus on compassionate, hands-on cardiovascular care as we train the physician-educators of the future.



Support for Liver and Kidney Disease Research and Training

Terence P. Kahn, a long-time administrator with the Department of Veterans Affairs, a Vietnam veteran and an Indianapolis resident, made sure to remember the IU School of Medicine in his estate plans, leaving a combined \$3.5 million to programs in the Department of Medicine. Mr. Kahn, who died in 2021, left \$1.5 million to establish the Terence P. Kahn Professorship in Nephrology. This gift will accelerate research and education benefitting patients with kidney disease. Mr. Kahn also left \$2 million to establish the Terence P. Kahn Liver Disease Program of Excellence, supporting liver disease research and education. We are grateful for Mr. Kahn's generous legacy.

Supporting the Department of Medicine

The IU School of Medicine's Office of Gift Development works with faculty, alumni, grateful patients, donors, and industry partners who wish to support the School and the Department of Medicine's educational and research missions. Please contact our colleagues below if you have any questions about how you can support a specific division.

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